ABSTRACT OF THE

Milroy Lectures

ON

EPIDEMIC INFLUENCES.

Delivered at the Royal College of Physicians, London, in February, 1888.

BY INSPECTOR-GEN. ROBERT LAWSON.

LECTURE I.

AFTER expressing his appreciation of the honour done him by the President and Fellows of the Royal College of Physicians in requesting him to deliver this series of lectures, Inspector-General Lawson briefly referred to Dr. Milroy's contributions to the geography and chronology of diseases, and said that though the existence of factors which lead to the diffusion and intensification of disease from time to time, which are not referable to the individuals who suffer or the localities in which they reside, has long been recognised, and their importance in etiological inquiries is manifest, yet little has been done to ascertain their nature or to indicate their mode of operation. About thirty years ago, when he was in charge of the medical department of the army in Jamaica, being anxious to find out how far the severe outbreaks of fever which had been met with among the troops there were attributable to local causes at the different stations that admitted of diminution or removal, he began to collect all the notices of the occurrences of epidemics of fever and several other diseases which he met with in the course of reading and in the periodical press. The examination of these records showed that, while at each station there were causes of insalubrity of a more or less permanent character, the severe epidemics of fever appeared at intervals only, leaving the respective stations comparatively healthy during the intermediate years, thus indicating the operation of factors during the epidemic years which were in abeyance during the intervening periods. Further investigation showed these factors were not confined to Jamaica, but were active in the surrounding countries, and sometimes even on both sides of the Atlantic about the same time. It became obvious, therefore, that the epidemic factor embraced large portions of the earth's surface simultaneously, and that records of disease over an equally extended surface, and for many years in succession, were required to indicate the course these factors pursued. As the evidence accumulated, it became apparent that in the case of fevers these outbreaks, besides embracing a considerable space in longitude, gave rise to epidemics in the respective localities they invaded, for the most part in a year with an even or odd number.

From the examination of a large body of evidence on the manifestation of fever in many countries, and extending over many years, it became obvious, the lecturer stated, that epidemics of that form of disease which became developed at various points from time to time passed uniformly to the northward until they finally disappeared. The length of the course of individual epidemics varied much, but from the combination of several details the period occupied in passing from the Cape of Good Hope to this country was found to be about six years, and the factor which determined this movement was evidently one of very general operation, and most likely connected with some of the natural forces. It was of great importance to define the position of this influence from time to time, and, after a good deal of consideration, it was found that this might be effected, approximately at least, by lines of equal magnetic dip. Assuming that the magnetic equator marked off the southern from the northern hemisphere, the isoclinals, 30°, 53°, 70°, 80° north, and 30°, 53°, 70° south, indicate fairly the different zones characterised by having their excess of fever in the odd and even years respectively in both hemispheres; and assuming that the factor proceeded northward like a wave at a uniform rate between these lines, its advancing edge may be considered as leaving the southern boundary of the zone on Jan. 1st and overspreading it during the year, so as to leave the southern boundary of the next zone on Jan. 1st of the following one. It would thus become operative in the successive zones in odd and even years respectively as it proceeded northward.

When the mortality from fever in different commands is examined year by year, it is found to be distributed somewhat differently in those which are tolerably compact from what takes place in others in which the posts occupied cover a larger area: thus, Ceylon, Jamaica, Gibraltar, Malta, and Bermuda have the great force of their epidemics in a single year; while in the West India Command, the Ionian Islands, Canada, and this country, in all which the individual stations are much further apart, and for that reason subject to a greater variety of local influences, when taken in the aggregate present less violent outbreaks than the former division, but have the mortality more equally divided between the first and following years of the epidemic, though the first year is generally distinguished by a sensible increase of the death-rate, which subsequently declines.

Inspector-General Lawson then reviewed the course of mortality from fever from year to year between 1817 and 1836 in Jamaica and the West India Command, in which latter the disease attained its highest development. The course of the pandemic wave which should have been met with at the Cape in 1816 was then traced. There being no return for 1816 available for the Cape, its first indication was found in Ceylon in 1818, when the mortality among the troops from fever, chiefly remittent, was 133·8 per 1000, about four times and a half the previous year's ratio. Its progress was then traced to St. Helena and Ascension in 1818, to India and Jamaica in 1819, to Gibraltar, Andalusia, Algiers, Toulon, and New Orleans in 1820, and to Bermuda, Canada, Baltimore, and Norfolk Virginia in 1821. Another wave, starting at the Cape in 1822, was traced to this country, where it arrived in 1827. The late extension of yellow fever on the Atlantic and Pacific coasts of America from the equator southwards, was then noticed, and its origin traced. The yellow fever epidemic at Monte Video in 1857 was then alluded to, as indicating the interval between successive waves in this part of the world. It commenced in February, and continued until the end of May, causing 1800 deaths at that place, and a great increase of mortality at Rio Janeiro and along the Brazilian coast; there were also a few cases at Buenos Ayres in March and in 1858, under the second year of the wave, a severe epidemic commencing in March, of which 1000 are said to have died. In continuation of the wave there was a severe epidemic of yellow fever at Sierra Leone in 1859, embracing Bathurst on the Gambia and Goree on the African coasts; also Trinidad and St. Thomas in the West Indies, and Panama. Inspector-General Lawson concluded by stating that the facts he had detailed showed clearly that there is a factor concerned in the production of fever which determines its appearance at points more and more to the northward in successive years; that this factor revives periodically every second year, or at some multiple of two years, passing like a series of waves over a more or less extensive portion of the earth's surface. These waves can be traced from Buenos Ayres and Cape of Good Hope in 35° south, to Northern Europe and Iceland, and in longitude from Ceylon and China to the west coast of America. To distinguish these he had named them pandemic waves. Of their intimate nature nothing is known at present, but as their position from year to year seems defined, approximately at least, by lines of equal magnetic dip, it is inferred they may be dependent in some way on that force.

LECTURE II.

In the second lecture, Inspector-General Lawson pointed out that not only fevers but other diseases are affected by pandemic waves, and illustrated this by the fact that small-pox epidemics in Europe and America follow in regular course on those in Hindostan.

These waves, like those of fevers, pursue their course to the north-west to variable distances, and they frequently cover very great spaces in longitude. The want of information regarding the course of small-pox in Central Asia to the north of Hindostan prevents this being demonstrated directly for that part of the continent, but its manifestations in the successive zones elsewhere show, as in the case of fevers, the progressive nature of the wave, and its lateral extension. The wave described as prevailing in the Madras Presidency in 1868 illustrates several of these points; this was active in the Punjab in 1869, and

in the latter part of that year small-pox commenced at Marseilles and in the south of France, and early in 1870 became extensively diffused in that country, and towards the end of it raged in Paris. The mortality from small-pox in London began to increase in the end of 1870, and in 1871 became developed into a severe epidemic, causing a mortality of 2·42 per 1000, the highest met with there for many years. In 1872 the remainder of England, as well as Scotland and Ireland, were covered with the epidemic. In 1871 the disease was very prevalent and fatal in Holland, in Germany extending into 1872; in the latter year Austria and Russia became severely affected, the disease in Austria having culminated in 1873. In 1870 small-pox became epidemic in Teneriffe from August, and at Havanna there was an epidemic which caused a death-rate of 3·17 per 1000, and the following year it increased to 5·77. In the United States Philadelphia had but nine deaths from small-pox in 1870, but there were 1879 in 1871, and 2585 in 1872; the disease was also prevalent in New York, and at Montreal and Ottawa in Canada.

The wave which was experienced in the Madras Presidency in 1872 appeared also on the west coast of Africa among the Ashantee and Yoruaba tribes in the end of the year, and at Old Calabar early in 1873; this year also it was severely epidemic at Sierra Leone. In the West Indies in 1873 it appeared in Kingston, Jamaica, in June, and had been in the country districts earlier. The death-rate at Havanna in 1873 was ·24 per 1000 only, but in 1874 this rose to 3·96, and the following year remained nearly as high. There was a considerable prevalence of small-pox all the summer of 1874 at Constantinople and its vicinity, and the epidemic which had prevailed in Austria in 1873 was then decreasing, though still frequent. In Western Europe and the United States small-pox does not seem to have shown activity anywhere in 1874, but in 1875 there were indications of an approaching increase of the disease at various points. Thus in Paris the death-rate rose from ·02 per 1000 in 1874 to ·14 in 1875; in Berlin from ·02 to ·05; and in Vienna, though there had been a rapidly falling rate since the epidemic of 1872, that for 1875 was little less than in 1874, and still stood at 1·14. In 1876 there was a death-rate of ·84 from small-pox in Brussels, of ·20 in Paris, of 1·72 in Vienna, and in London of ·21, while in England generally it was ·10. In 1877 the death-rate declined at all these points except London, where it rose to ·71, and in England, where the rise was to ·17 only; a great fall, however, took place at both next year. In 1878 there was an epidemic at St. Petersburg, causing a mortality of 1·53 per 1000; this reached 1·93 in 1879, and then declined. In America the deaths from small-pox in Philadelphia in 1874 were 16 only, in 1875 there were 56, and 409 in 1876; in Brooklyn there was a death-rate of ·58 per 1000 that year. In 1877 there was a very severe epidemic among the Indians around Lake Winnipeg, and another in Montreal in 1878, causing a mortality of 5·45 per 1000. This epidemic, like that which preceded it, passed from south to north, but instead of reaching Berlin and Paris in Europe, and Philadelphia and New York in America, in force, in 1874 or 1875, the disease culminated in all these in 1876, and seemed attributable to another wave following that, the operation of which was manifest in the increased frequency of the disease at Constantinople and in Havanna in 1874. Whether this second fluctuation was simply a continuation of that experienced in the central provinces in India in 1874, or a fresh one arising somewhere beyond the isoclinal, 53° north, the evidence does not suffice to indicate.

The next wave, which appeared in the Madras Presidency in 1877, and was in force in the Bombay Presidency and Berar the same year, embraced the Central Provinces and the Punjab in 1878. In the latter part of 1879 this became sensible at Marseilles, where there were 500 deaths from small-pox that year, the epidemic continuing into 1880, and the death-rate in Paris in 1879 rose to ·48 per 1000. In 1880 small-pox was epidemic in Corsica; the mortality from it in Paris was 1·14 per 1000, while in Rome it was 1·83 and in Madrid 3·03 per 1000, falling there to 1·98 the following year. In London the death-rate in 1880 was ·12 per 1000, but in 1881 it rose to ·62; in St. Petersburg this year the death-rate from small-pox was ·34 only, but in 1882 it rose to ·77, and fell again to ·46 the following year. The disease was also epidemic in Ireland in 1882. While these outbreaks were occurring in Western Europe, there was in 1880 a mortality of ·74 per 1000 in Alexandria, the rate the previous year having been ·08 only; and in Venice and Trieste the mortality was ·82 and ·95 respectively, as against ·00 and ·22 the preceding year; in 1881 the disease reached in Buda-Pesth 1·19, Vienna 1·22, and Prague ·64, and the rate declined at each the following year. Small-pox was frequent in Havanna in 1880, as well as in San Antonio and Matamoras, in Texas; and there was a death-rate from it in Philadelphia of ·47 per 1000. In 1881 the rate in Philadelphia rose to 1·54; in New York the same year it was ·36, and in Chicago 1·70; in Baltimore, which had a rate of ·03 only this year, it rose in the following one to 1·35.

The next wave, which affected the Mysore in 1882, and became developed in the Madras and Bombay Presidencies, Berar, and North-west Provinces in 1883, underwent a further increase in the latter in 1884; the mortality from small-pox in the Punjab also reached its highest point at this time. Following the example of previous epidemics, some trace of this one was to be looked for in Europe in 1885, and in Venice the mortality per 1000 from small-pox, which was ·63 in 1884, rose to 2·24; in Buda-Pesth it rose from ·14 to ·42, and in Vienna from ·12 to 1·13; in Rome the rate in 1884 was ·38, which rose to ·66 in 1885, and to 1·36 in 1886. In this year, too, there was a very severe outbreak in Marseilles, with a death-rate of 5·45. In Paris the ratio in 1885 was ·03, and in 1886 ·09 only. In London in 1886 the mortality from small-pox was too small to be sensible in the second place of decimals.

These details render it apparent that small-pox, like fever, is under the influence of a pandemic factor which determines its development as an epidemic at some point in the first instance, and its subsequent extension to the northward in successive years. The existence of the pandemic factor being thus recognised, its nature and modes of action become, the lecturer stated, proper subjects for investigation. Of its intimate nature nothing is known, and there is as yet no explanation of why it should proceed from south to north, or why it should have a two-yearly period, and lead to a development of disease in some of the zones on the map in a year with an odd number rather than an even one, and *vice versâ*. It frequently occurs that in the same year, and under the same wave, there is a great development of fevers over an extensive space in longitude, but the kind of fever may vary much at different points. Thus in 1828, when febrile disease was particularly prevalent throughout the Mediterranean, there was a very severe epidemic of yellow fever in Gibraltar; petechial typhus raged at Naples, according to Lanza; remittent fever caused a high mortality among the troops in the Ionian Islands; and plague raged in Greece, as also in Egypt, Syria, and in Constantinople. There is a similar record from India in 1836-7, when the disease called there Pali plague was active at Pali in Marwar, in the western part of Rajpootana, and the mahamurree in the Himalayan districts of Gurhwal and Kumaon; in the intermediate space ordinary intermittent was rife in Jeypoor, common remittent in Ulwar, and a deadly infecting epidemic prevailed in Rohilkund, the country lying between Ulwar and the foot of the hills where the mahamurree was doing its work.

After discussing the epidemics of yellow fever which raged in Sierra Leone in 1823, 1829, 1837, and 1847, Inspector-General Lawson said that the reappearance of plague at various points where it had formerly been epidemic from time to time affords some very valuable and interesting illustrations of the different stages it passed through from its first indication to its development. Several epidemics were alluded to, and from the accounts given of them it appeared that, though generally commencing about November or December, they seldom caused much mortality until late in March, and far the greater portion of it occurred in April and May, after which it declined rapidly, and seldom extended into July. The individual epidemics, too, showed a high death-rate the first year, and generally there was a recrudescence the following one, with a much smaller loss. When a series of outbreaks continued for three or four years, it seems reasonable to infer that there have been at least two distinct epidemics, one following the other, as has been explained above, in reference to fever. This view is borne out by the facts that the first outbreak in Mesopotamia in 1873-74 was continuous with those in Assyr and Bengazy, while the extension of the disease to the northward and to Shuster in 1875-76 was soon followed by the epidemics in Kumaon and Yunan; and in Bagdad, which first experienced the force of the epidemic in 1876, the deaths from the commencement to June 17th were 2611, while in 1877 for the same period they were only

1672. Fully developed plague is frequently preceded by the benign form for a variable period, but whether there be a specific factor required to excite the fully developed disease, or whether that causing the benign form merely becomes intensified in certain localities from circumstances existing temporarily are points which must be left for future investigation, which the progress of bacteriology may hereafter facilitate.

LECTURE III.

Though the literature of yellow fever be very extensive and highly controversial, the questions discussed in it are but few, the chief being whether it be a highly contagious disease, propagated from man to man, and always imported from some locality where it was already in existence to that in which it newly appears, or whether it be dependent on causes existing at the place where it springs up, and altogether devoid of contagion. The doubts which stood in the way of settling these questions are partly due to there having for long been no means of drawing a clear line of demarcation between yellow fever and the ordinary fevers of the country where the yellow fever showed itself, and to a much greater extent from a complete misapprehension of the bearing of the evidence connected with its appearance. To deal successfully with this subject it is necessary to show clearly where the error lies on these points before proceeding further.

There is no symptom seen in yellow fever that may not be met with in other forms of disease, and it is only by grouping them in connexion with certain periods in the disease that its identity can be fairly established. In 1847, at Demerara, Dr. Blair found albumen and tube casts in the urine in yellow fever cases, while in the ordinary remittent and intermittent fevers, occurring at the same time, there was no trace of either in that fluid. Subsequently it was observed, in the north of Italy, that in congestive forms of intermittent the urine contained albumen during the cold fit, but that disappeared during the period of reaction, which is not what is observed in yellow fever. When in Jamaica, from 1856 to 1860, Inspector-General Lawson employed the opportunities which presented themselves there to follow up Blair's investigation, and to acquire what other information he could regarding yellow fever; and after his return to this country the results were arranged and published in the *British and Foreign Medico-Chirurgical Review* of April and October, 1862 (vols. xxix., xxx.). From these the following are the distinctive characters of this disease:—1. Yellow fever usually terminates in death or convalescence from the fourth to the seventh day; but either may occur as early as the second, or not before the tenth or twelfth, or even later. 2. There is generally yellowness of the eyes and surface, commencing at various periods in different individuals and epidemics. 3. On the evening of the third day, or morning of the fourth, the urine usually presents traces of albumen; on the latter a considerable sediment appears in it, consisting almost wholly of epithelium from the bladder; this is succeeded by an equally copious one on the morning of the fifth day, which consists almost exclusively of granular tube casts from the kidneys, with scarcely a trace of the epithelium from the bladder. By this time the albumen has usually become considerable, the chlorides and urea have been greatly reduced, and the urine is usually scanty, and may even go on to complete suppression; if there be much yellowness, it may contain a variable quantity of the colouring matter of the bile. 4. The alvine discharges are devoid of the natural feculent appearance from the third day onwards, becoming greyish or yellowish-white, with quantities of black matter diffused through it, when they are formed; when fluid, consisting of mucus tinged with the preceding, or with bile, or blood in variable quantities. On the approach of convalescence the evacuations assume the natural colour. 5. As the urinary and alvine evacuations assume these characters, there is a great tendency to black vomit, or discharges of similar matter from the bowels, or to the so-called hemorrhages from the various mucous surfaces, or even in some cases from the skin, and after death such may be found in the stomach and intestines when they have not been discharged during life.

Such are the distinctive features of a normal case of yellow fever; but in some the urinary symptoms may occur earlier than here mentioned, and in others they seem delayed for a day or two; but whenever watched from day to day and properly examined, it is found that the changes in the urine not only embrace the presence of albumen, but indicate desquamation of the bladder and kidneys as regular features of the disease, and when these are fully developed the urea is much diminished, and the chlorides almost if not completely absent.

There has long been a contention between the two parties as to the form of yellow fever, the contagionists affirming that it is always continued with a paroxysm of about seventy-two hours, followed by the characteristic symptoms of the disease; while their opponents maintain that the latter are often found as fully developed in cases in which the fever has been distinctly remittent, or even intermittent, as in those which present the single paroxysm. Previously to our becoming acquainted with the urinary symptoms, when the line of demarcation between the ordinary forms of fever and yellow fever could not be drawn with precision, there might have been sufficient doubt on this point to afford ground for ardent controversialists to differ upon, but the trustworthy diagnosis made possible by the present knowledge of them has enabled numerous observers, in different countries, to verify the fact that yellow fever is met with not only in the continued form, but frequently as a remittent, and from time to time even as an intermittent. Whether the continued form be that proper to the disease and the other hybrid forms impressed on it when the ordinary malaria which gives rise to periodic fever is rife need not be inquired into at this time; it is sufficient for the present purpose that it be clearly understood that a form presenting the characters set forth above as those of yellow fever occurs, both sporadically and in epidemics, in a periodic as well as a continued form.

Having thus described yellow fever, the next point for consideration is what conclusion, as to its cause, does the occurrence of such a case sanction our drawing? At present there is no means of ascertaining whether the cause of yellow fever or those of other fevers are in activity in any locality, unless by finding man or animals subject to them contract the disease when there exposed. Men or animals may be said to be the only reagents by which the presence and activity of the cause of yellow fever can be detected; and when one or more cases appear in any locality, that fact merely proves they have been subjected to the operation of the cause, but affords no indication of its nature; this must be arrived at from other considerations altogether. The practical question for settlement in such cases is whether the attacks of yellow fever which occur in a locality, more or less circumscribed, arise from exposure to causes in operation in the locality at the time, as one party of the controversialists maintain, or whether the disease must have been introduced by some one or more who had come recently from another locality where it was already prevailing, and from whom it was communicated to others around them, and so on, as is believed by the opposite party. Now in such an instance, to establish the position that the disease was introduced, and subsequently spread by communication from the sick, it is clearly necessary to exclude the possibility of the outbreak having arisen from local causes, and it is obvious from what has been explained above that this can only be inferred with certainty when there are no more cases in the locality at all. In the great majority of examples adduced in support of the contagiousness of yellow fever no attempt has been made to exclude a local cause, and, when legitimately interpreted, the evidence that they afford is quite insufficient to establish the conclusion based on it.

There are numerous well-authenticated facts showing that, when yellow fever has sprung up in a locality, persons going to that locality may contract the disease, and should they leave before it became developed and go into a healthy one, they pass through the fever without affecting anyone about them, and this even when their numbers are considerable. A ship may be considered as a locality like a circumscribed space on shore, and she may have an active source of yellow fever produced in her; but she differs from the place on shore in this respect, that she is movable, and can, and when in this state frequently does, convey her febrific powers unimpaired to great distances. Her crew and passengers, or such of them as may be exposed to the emanations from her hold in a moderately concentrated state, may present a succession of cases of fever during her passage from one point to another, while others who are less exposed may continue in good health, though they communicate freely with the sick: and at the end of the voyage, when the cargo is being removed by persons who have not been in

contact with the crew, many of them may contract yellow fever in its most pronounced form, as well as others who, from curiosity or otherwise, may have exposed themselves to the emanations from her hold; but there is no well-authenticated instance of yellow fever having been communicated by any of the latter to other persons on shore who have not come within the range of the emanations from the vessel.

All that is known of the nature of the immediate exciting cause of yellow fever seems to indicate that it is particulate, and is given off from a collection of mud in a ship's hold, or from a marshy or damp spot on shore, with its pathogenic germs fully developed; but until it arrives at this condition the crews of ships do not have any attacks of the disease. The course of various epidemics at Bermuda quite accords with this view, and they show that the potential factor can be diffused by the air, even over very extensive geographical areas. On most of the occasions on which Bermuda has suffered, yellow fever has extended along the Atlantic coast of the United States to as high a latitude as, or even higher than, that of Bermuda, and it has appeared in Europe occasionally about the same time. The epidemics at Lisbon and Oporto, which commenced at those places to a limited extent in 1856, and were developed to a much greater one the following year, corresponded with this of 1856 in Bermuda. Both had arisen under the extension of the same pandemic wave which was experienced at Monte Video in 1853, the progress of which northwards was traced in a previous lecture.

LECTURE IV.

Cholera, like yellow fever, has given rise to much controversy among the members of the medical profession, since it became active in India seventy years ago. It has been described by many as being highly contagious, and always transmitted from man to man; and, as it was supposed it never travelled faster than man, it was concluded he was the active agent in carrying and diffusing it, and from this it was deduced that, as his means of locomotion increased in speed, cholera would spread over the world with corresponding rapidity, and along the lines of communication he most frequented. By others, chiefly those who had experience of it in India, the disease was held to be devoid of contagion—to depend on local causes; and Jameson, who compiled the earliest report on the epidemic of 1817-18, from the observations of the medical officers in the Bengal Presidency attributed its extension from Bengal to what are now called the North-west Provinces and the Punjab to the active cause being carried by the moist easterly winds on the setting in of the monsoon. As was the case with yellow fever, much of the evidence, supposed to sanction particular conclusions, was in a form which did not permit it to be analysed so as to eliminate various factors that might have been in operation, the influence of which it was necessary to exclude before the point under investigation could be established.

Cholera occurs in two forms. In one, commonly designated summer cholera, or cholera nostras, though there may be frequent vomiting, and diarrhœa with severe tormina and griping, and cramps of the voluntary muscles, yet there is seldom much collapse; the matter vomited is bilious, and the stools are coloured; the voice may be weakened, but is little altered otherwise; the urine is not suppressed; and the mortality is very small. In the other, usually called Asiatic or Indian cholera, but which, as involving no hypothesis, will hereafter be designated malignant cholera, is characterised by marked collapse; the matter vomited is devoid of bile when the disease is fairly developed; the stools are watery, colourless, with mucous flakes floating in them; the voice is like a hoarse whisper; the urine is suppressed; and the mortality is very great. Cholera nostras appears every summer to a limited extent, though in some years in considerably greater numbers than usual. Malignant cholera, in temperate climates at least, generally occurs as an epidemic, and advances over new ground in successive years. A typical case of cholera nostras is readily distinguished from one of malignant cholera, but there is, nevertheless, a relation between them resembling that between benign plague and the fully developed form of that disease.

Nearly every summer, since the invasion of Europe in 1830, sporadic cases have been met with presenting the characters of the malignant disease so completely, that, had they occurred in the middle of an epidemic, they would have been accepted without hesitation as typical examples of it. These cases generally appear singly; at other times they are followed by a few others, forming a small group; but, in both instances, those who believe cholera to be transmitted from man to man decline to admit them as malignant cholera because they cannot affiliate them to a previous case, and they are not invasive—that is, do not form centres from which the disease radiates. Yet if an individual come from a place where cholera is prevailing to another still unaffected, and have diarrhœa, either on arrival or within a few days after, and cholera subsequently appear among those he mixed with, the same party maintain that the diarrhœa was incipient cholera, and that it was through this individual cholera was introduced into the locality. These two conclusions, though opposed to each other, have been adopted as necessary requirements of the theory which ascribes the diffusion of cholera to man, to enable it to embrace the actual occurrences; but, so far as the lecturer is aware, there is no evidence from the behaviour of the disease itself, when properly analysed, which supports either of them.

The occurrence of a case of cholera in any locality (supposing the person who is attacked has not been away from it for some time) merely indicates that the cause of the disease is active in that locality at that time, as has already been explained in connexion with yellow fever; and before the appearance of the disease in the locality can be attributed to communication from a previous case, which had arisen elsewhere, it is necessary to exclude the influence of local causes, a precaution that in the great majority of instances has been altogether overlooked. There are now on record a good many instances of even extensive epidemics of cholera, which broke out at points far removed from any place where the disease was already in progress, and without any trace that could be detected of importation by man or fomites. Two were mentioned by the lecturer which were investigated minutely at the time by able and experienced observers, who failed completely in eliciting any evidence of importation. These were the outbreak in this country in 1865, and that in America in 1873. They showed conclusively that malignant cholera may spring up in a locality far removed from the place where it is epidemic, without being introduced by persons labouring under it or their surroundings; and as small groups of cases, as at Southampton and its neighbourhood, can so arise, it is clear single sporadic cases may do so, and there is really no ground for declining to admit such cases as the malignant form of the disease when they exhibit the symptoms of that form, even though they do not spread. On the other hand, there may have been importation to a locality of persons labouring under cholera previous to an outbreak in that locality, but this fact cannot establish the conclusion that the disease was communicated by them, unless the local cause can be excluded, which, in the great majority of such instances, the nature of the evidence does not permit of being done.

In dealing with the epidemiological aspects of cholera, it is necessary to consider the relations of cholera nostras to the malignant form of the disease. Cholera nostras is not a disease depending merely on the warmth of summer, or the abundance of fruit, as many seem to believe; but when examined for a sufficiently long period, its frequency and fatality are found to fluctuate considerably, rising as the place or country under observation is approached by the malignant disease in an epidemic form, and falling again as that passes on. The death-rates from cholera in successive years in the Registrar-General's forty-eighth Annual Report, for 1885, for England (p. lxi.), and for London (p. lxiii.), when compared with the manifestations of epidemic cholera in Europe, show this relation clearly, and the same feature is found in the Scotch return for that country. Information from other countries is to the same effect; for instance, in 1865, when cholera was epidemic in the south of France and other parts of the Mediterranean, cholerine, accompanied by an unusual number of cases with the character of malignant cholera, was much more common in Denmark and the south of Sweden than for several years previously, just as occurred in England and Scotland at the same time. The records of cholera in the military returns for other parts of the world bring out the same feature for previous periods. These facts sanction the conclusion that there is connexion between the cholera nostras and malignant cholera, resembling that between benign plague and the fully developed form of that disease; and, as with plague, that

cholera nostras, together with sporadic cases or small groups of cases (as at Southampton and Theydon Bois) of malignant cholera, may precede an advancing epidemic of the malignant disease by a great distance, or may spring up on either side of the epidemic field as it passes on, as took place in this country in 1859, when, with a general increase in the mortality from cholera nostras, three small outbreaks of malignant cholera occurred, one at the coastguard station on Southampton Water, near Netley, in July; another at Glass Houghton, a village near Pontefract, in Yorkshire, in October; and a third near Wick, in the north of Scotland, in the end of summer; while cholera was epidemic along the west coast of Europe, from the south of Spain to Sweden. Though a small amount of cholera nostras is met with in temperate climates nearly every year, it is obvious than an increase of that disease, especially if accompanied by sporadic cases of the malignant form, indicates greater activity of the exciting cause of the disease, and may even presage the early approach of the malignant form as an epidemic.

The appearance of cholera in Bengal in 1817, and its subsequent pandemic extensions, have led many to believe that the disease was a new one, and that its source was what the late Dr. Bryden described as "the endemic area," the country between the meridians of 86° and 91° east, from the sea north to the base of the mountains, where it was always to be met with. Subsequent investigations have shown that malignant cholera is a very old disease, and have raised a doubt whether the endemic area, though a very important source of the miasm producing cholera, may be the only one even in India itself. This is a question of some importance in connexion with the epidemiological relations of cholera, which, however, the evidence available at present may not be sufficient to place on a sound basis.

The lecturer had read a paper before the Epidemiological Society in 1871, which will be found in the third volume of their Transactions, at page 288. In this the details of a considerable number of outbreaks of cholera on board ships in both the Atlantic and Indian Ocean are given, with the necessary information as to time and locality, as far as they were available. These illustrate the diffusion of the epidemic factors over a very extensive area. As it would occupy too much time, however, to introduce even a moderate number of them here, it may be stated, in general terms, that when present they show that the cholerific influences are usually diffused very extensively in the south-western part of the Indian Ocean, though cholera may not become epidemic at many points; and what is worthy of remark, it often shows itself in the form of sporadic cases, sometimes fatal, and accompanied by an unusual prevalence of choleraic diarrhœa, in the Cape Colony or Natal, some months before the disease becomes epidemic elsewhere nearer the equator.

This transport of the exciting cause of cholera by a current at some elevation in the atmosphere, and separated from the earth's surface by a thick stratum of air, which may either be motionless, or forming a current flowing, it may be, in a different direction, plays a frequent part in connexion with the manifestation of that disease. In reading accounts of the circumstances preceding the occurrence of isolated outbreaks in India, one is struck by the frequency with which these immediately follow a thunderstorm, or a heavy fall of rain, or even a dust storm, all of which bring a portion of the higher strata to the ground, and with that of course whatever material it may contain. This sequence is quite as remarkable at the elevated mountain stations as in the plains, and, as was the case at Peshawur in 1862, this was repeated no less than four times between July 7th and November 3rd, causing a distinct outbreak of cholera on each occasion. The origin of epidemics of cholera in localties far removed from where the disease has been active, without the population in the intermediate space having shown any trace of the disease, as in the epidemic in Syria in 1875, must have been preceded by a similar combination of circumstances.

As regards cholera, ships behave much in the same way as with yellow fever: some have no cause of unhealthiness in them; in these, though even considerable numbers of their crews or passengers may contract cholera from exposure to its causes on shore or at sea, yet when removed from the source of the disease by change of locality, the fresh attacks usually cease within a few days, and, as has been shown above, this also takes place in those some time at sea when they have been affected there for the first time. There are other instances, however, in which the ship herself becomes a focus of cholera, and not only those on board suffer, but even persons outside, who have come within the range of the emanations from her, contracted the disease. This has taken place in crowded emigrant ships only, and has been confined in a great measure to the steerage passengers, the ship's crew suffering but occasionally, and to a limited extent, while the cabin passengers seem to have had complete immunity. The disease in most cases of this description does not seem to have been introduced from the shore just before sailing, but to have appeared some days after, and to have increased during the voyage.

REMARKS ON THE

SURGICAL TREATMENT OF DEPRESSED COMPOUND FRACTURES OF THE SKULL.[1]

BY LAWFORD KNAGGS, M.A., B.C. CANTAB., F.R.C.S.

THE case[2] which furnishes the opportunity of making the following observations belongs to a class by no means uncommon. It is one of compound depressed fracture of the right temporal bone, and was for eight days unattended by any symptom except a state of noisy delusional insanity, chiefly having reference to the home life and daily associations of the patient, and requiring subcutaneous injections of hyoscyamine to keep him under control. On the tenth day, in consequence of a rapid rise of temperature to 104°, slight dilatation of the right pupil, incontinence of urine and fæces, and diminished consciousness, the depressed fragments were exposed by the reflection of a large flap and removed. The dura mater bulged into the wound and did not pulsate. It was found to have been wounded near the lowest part of the aperture. The opening in the skull was enlarged till it measured about an inch and a half square, and a flap of dura mater was thrown down, and the brain—which bulged prominently and did not pulsate—was exposed. Except for the bulging, its surface looked healthy. It was explored in two or three places to the depth of an inch with a hypodermic syringe, but only a little brain matter was drawn off. The dura mater flap was united with fine silk sutures. The under surface of the skin flap was thoroughly cleansed with strong carbolic lotion and replaced. The patient lived for eighteen hours, and was in no way benefited by the operation. The post-mortem showed that the dura mater flap was perfectly united, and several of the sutures were completely buried in healthy lymph. The injury had caused superficial laceration of the brain in the adjoining portions of the inferior and ascending frontal and superior tempero-sphenoidal convolutions, and there were softening and bruising of the brain substance beneath for quite an inch.

Of the points in the case that attract attention the most interesting is the peculiar mental state which supervened on the injury, and had but slight resemblance to the condition known as cerebral irritation. The writer has only seen one case that at all resembled it—a man with a fractured base, who for weeks after his accident was a continual source of trouble and anxiety in the ward in which he lay. Billroth alludes to two somewhat similar instances, and all eventually recovered. The absence of pulsation of the brain and dura mater, associated with the bulging, was very misleading at the time; but it was no doubt due to the extreme feebleness of the pulse, and reappeared with the improvement produced by an injection of ether. Still more misleading was the marked bulging of the brain into the gap in the skull. It was more pronounced than in the case of a large cerebral tumour which the writer recently saw removed by Mr. Horsley. It must have been produced by the tilting inwards of a large fragment, like an inclined plane, causing protrusion of the brain substance above it. As the brain substance at this spot was not softened, and had been moulded by prolonged compression, it did not regain its level during the performance of the operation. After death the bulging had given place to depression. One other point that has an important bearing upon the question of thorough exploration in these cases, was that the laceration of the brain that

[1] Read before the Leeds and West Riding Medico-Chirurgical Society January 13th, 1888.

[2] The writer is indebted to the kindness of Mr. Samuel Knaggs, under whose care the case was, for permission to make use of it.

was found to exist post mortem was not exposed by the complete removal of all the fragments at the operation. That portion of the bony margin of the gap that concealed it was composed of the outer table only. The corresponding portion of the inner table constituted that part of the fragment that was depressed most deeply, and which caused the laceration. As the inner table is generally fractured to a greater extent than the outer table, the condition described is probably not of infrequent occurrence.

In all compound depressed fractures the chief danger to be feared is the onset of intra-cranial inflammation. Its danger consists in its septic type, and, according to Billroth, blood poisoning, which is nearly always associated with traumatic meningitis and manifests itself by high fever, is frequently the cause of death.[3] Under the present antiseptic method of treatment the introduction of septic material is most likely to take place at the time of the accident, or not at all; and when we consider how these injuries are usually produced, it is not to be wondered at that septic infection results. Now extensive operative procedures upon the cranium and its contents are no longer "to be ranked among the dangerous procedures of surgery," and the most potent causes of intra-cranial inflammation are the irritation produced by depressed and shattered fragments and a septic condition of the wound.

What object, then, can there be in postponing operation till the depressed fragments have set up the much-feared inflammation, or the rise of temperature occurs which marks the onset of blood poisoning? Those who hesitate to interfere say—(1) That trephining is a very fatal operation. It has now been conclusively shown that it is an unusually safe proceeding. The mortality following it in such cases as these is to be attributed not to the operation, but to lesions of the brain caused by the injury, or to conditions that have been allowed to develop before the surgeon has interfered. (2) That some of these cases recover if left alone. Undoubtedly some do. But what is the future history? Some never suffer seriously; but the proportion of those who come under treatment subsequently for serious symptoms traceable to the injury cannot be inconsiderable. Two of Mr. Horsley's[4] ten brain cases are of this nature, and at least four other cases have come under the writer's observation. In one the injury had probably originated a malignant growth just beneath the depression. There is no desire to suggest that early interference would prevent the later trouble in all these cases, but it undoubtedly would in many.

If the desirability of early operation is admitted, the object for which it is undertaken is not only as stated in Holmes' "System"—(*a*) "to elevate or to remove the fragments which are driven down," but (*b*) to render the wound thoroughly aseptic; and upon both these points something may be urged in favour of a more extended and thorough procedure than is usually employed.

It is laid down in Holmes' "System of Surgery,"[5] that in trephining "care should be taken to remove as little bone as possible," and in the next line occurs the following passage: "In looking over the skulls in our different museums, it is curious and most instructive to observe how frequently a sharp edge of the inner plate of the bone has been left depressed." Surely this is a proof that, in the anxiety not to remove more bone than was necessary, the object of the operation had been only partially carried out. Now the amount of bone removed, within reasonable bounds, seems to have but little bearing upon the shock produced by the operation, except by adding to the length of the operation. The gap left is filled up by a tough fibrous membrane, which forms an efficient protection; and according to Mac Ewen a certain amount of ossification can be produced by replacing fragments of bone in the gap. It would seem to be wiser, then, that the removal of bone should not be niggardly, but sufficiently free to leave no possibility of any depressed edge or splinter being left behind. And this is especially desirable should the dura mater have been wounded.

In these cases it has been the custom to treat the dura mater with the greatest respect. If it has been injured or is transfixed by a foreign body, that body has been removed and the outside of the membrane been bedewed with spray, or, perhaps, syringed with lotion; or if the membrane has not been injured, but symptoms have been suggestive of mischief within, the dura mater and also the brain have been punctured or incised. Success in other regions of the body has not been attained by measures so half-hearted as these. A joint opened under septic conditions would be syringed thoroughly with a powerful antiseptic solution. A peritoneum similarly injured would be either thoroughly cleansed at once, or certainly on the onset of the septic inflammation that would be almost certain to follow. The nature of the cranial contents is such that when once diffuse inflammation sets in it is beyond the surgeon's power to reach it, and, consequently, to cope with it. Therefore, any effort to deal with this danger should be preventive, and no time is so suitable as that immediately succeeding the injury. To introduce a syringe through a small opening in the dura mater and try to wash the parts is a proceeding that cannot be regarded as either efficient or safe, but if sufficient bone be removed a flap of dura mater of varying size can be in many instances so arranged and thrown back that the part immediately under the puncture can be freely exposed. Then any clot that is present can be removed, any injury to the brain can be ascertained (a point of importance in connexion with subsequent abscess), a foreign body extracted, and any lacerated brain tissue, especially if in contact with a foreign body, can, if thought desirable, be taken away. The exposed brain and under surface of the dura mater can now be *thoroughly irrigated* with a powerful antiseptic lotion. There need be no fear of any of the lotion making its way to the base of the brain; if a little did, it would do no harm, judging from Mr. Horsley's operations; but, as a matter of fact, the brain is usually sufficiently in contact with the dura mater to prevent this. The flap of dura mater should now be replaced and united by a few fine silk sutures, and the wound in it similarly closed. From the experience of this case it would seem that complete union takes place as rapidly almost as in the case of the peritoneum, and that a few hours will be sufficient to shut off the intra-cranial cavity from the wound. If it has been possible to render that perfectly aseptic, an important point will have been gained. The large flap suggested by Mr. Horsley will be of great value even in those cases where there is already a wound communicating with the fracture. It has distinct advantages over the old crucial incision. It can be stripped down with the greatest rapidity and ease, carrying the periosteum with it. It exposes a surface of bone large enough for all the surgeon's requirements, who is not hampered by retractors more or less skilfully applied or obliged to work in a hole. It is likely to prove a valuable preventive of cerebral hernia; and, lastly, it gives the very best facility for the free removal of damaged and dirtied deeper structures, for the free application of the most powerful antiseptics, and for the thorough cleansing of the wound and its immediate neighbourhood.

The points to which the writer has endeavoured to draw attention are—1. The value of the large flap over the crucial incision. 2. The advantages to be derived from a free removal of bone. 3. The desirability of thorough exploration, even by means of a flap of dura mater, in cases where that membrane is injured. 4. The great importance of thorough cleansing with powerful antiseptics, even of the cerebral substance itself in suitable cases, and of endeavouring to secure from the commencement complete asepsis.

[3] Billroth's Clinical Surgery, p. 40.

[4] British Medical Journal, April 23rd, 1887.

[5] Vol. I., p. 584.

ON

OIL OF PEPPERMINT AS AN ANTISEPTIC, AND AS A REMEDY IN PHTHISIS AND DIPHTHERIA.

BY W. LEONARD BRADDON, M.B., B.S. LOND., F.R.C.S.

THE proof of the parasitic origin of a number of diseases, the nature of which could have formerly been only theoretically affirmed, leading, as it has done, to the systematic prevention of many maladies by antiseptic methods, forms probably in its importance to humanity the crowning achievement of this century. But while the results of the application of Pasteur's studies and Lister's system for the destruction of germs outside the body, or to prevent their inroad within, have been so great, the vague hopes raised that "internal microbicides" might be discovered which should give us

effectual arms against every disease of parasitic origin have been for the most part doomed to disappointment. And this result might, with regard to phthisis, diphtheria, cholera, and many other diseases in which one or another antiseptic has been persistently tried internally, have been confidently foretold; because all of these maladies have already been treated with every known remedy in the past, and the construction of the new theory has altered neither the efficiency of the drugs nor the character of the disease. The conditions of the cultivation tube are not those of the body. It is not sufficient to know the strength of an antiseptic which will destroy bacilli or prevent sporing outside; what we want to obtain for every case is an antiseptic which can be applied *in efficient strength within*. It is useless to know that "1 part in 20,000 of corrosive sublimate will kill the spores of charbon in ten minutes."[1] To obtain this degree of saturation in the system a dose of 52·5 grains would be required to be absorbed into the body of a man (weighing 150 lb.) at one time. Even with a limit of this drug of 1 in 300,000, a strength which "retards the growth" of charbon-spores, a quantity equal to 3·5 grains must be circulating through the whole body at a given moment to reach the required strength, a dose which, so far as we know, is impracticable. Hence, *quoad* the use of corrosive sublimate in anthrax, the result is hopeless. And the same must be said of nearly all the other antiseptics prescribed for diseases the cure of which they cannot effect before the patient dies. Exceptions there are, and these are the "specifics." But their discovery dates from long before the germ theory or the days of antiseptics. They are mercury for syphilis; iodide of potassium for other syphilis, whether this be the same or a variety; quinine for certain agues; salicylic acid for rheumatic fever; and ipecacuanha for dysentery. Four internal microbicides among all the antiseptics! Pure cultivations of the germs of any of these diseases have not, so far as I know, yet been made. When they are, it will probably be found that the active principles of their specific remedies destroy them in doses of very great tenuity — such as might be ascertained, for instance, for syphilis, by calculating the possible amount of mercury contained in the body, at any time, of a person undergoing a course of cure by it. The moral of this is, first, that it is useless to seek a remedy for a disease among substances that cannot be tolerated in the same proportion in the body in which they are required under conditions more favourable—a cultivation tube. Hence the recent attempts to cure phthisis by gaseous rectal injections of sulphuretted hydrogen, recalling the medical buffoonery of mediæval ages, are also theoretically unsound, and might, *a priori*, have been condemned as useless. Little less chimerical was the Teutonic suggestion, recently made, to endeavour by the administration of lime salts to force tissues, independent of chemistry, to take on the rarest issue of tubercles in the least frequent of general degenerations, that of calcification.

The second result of these considerations is one which has led me to the present article. It is that as all the efficient internal antiseptics, hailed as specifics, have owed their birth to empiricism, we must so far be empirical that we should try every new compound which can be swallowed for every hitherto incurable disorder. This need not be trusting wholly to blind chance, although, even so, it was probably blind chance which found the cure for syphilis. On how many disorders had mercury not been tried before its *specific* virtues were discovered? Bacteriology will help largely by first announcing what substances sterilise what cultivations, and in what proportion. If the limit be within human dosage, the antiseptic may be tested, and haply among ten thousand another specific be discovered.

It would be useless to go over the list of substances used as antiseptics. Observers differ greatly; and in the magnificent work of MM. Cornil and Babes,[2] which I have reviewed elsewhere,[3] an excellent summary of Duclaux's, Koch's, and Warrikoff's researches will be found. From them it is sufficiently apparent that as external antiseptics carbolic acid, eucalyptus, thymol, salicylic acid, borax, permanganate of potash, arsenic, and petroleum[4] are next to useless, and internally entirely so. Not less practically inefficacious are the vapours of bromine, iodine, and sulphurous acid, which require prolonged contact of at least forty-eight hours to destroy spores. Moreover, none of the remaining efficient external antiseptics can be used, in the doses required, internally. Hence the action and limit of efficiency of *oil of peppermint* is not only remarkable, but of the highest possible importance. Koch,[5] in his researches on the charbon bacillus, found that 1 in 300,000 parts of this drug arrested the development of spores, and the vapour very quickly killed both spores and bacilli. But this observation—one, as it seems to me, of the greatest value—has hitherto fallen upon unfertile ground, and it is the object of this article to endeavour to draw the attention of the profession to what promises to be not only the best general antiseptic, but one of especial value as a remedy in phthisis and diphtheria.

The conditions of the laboratory are very different from those of ordinary surgical and medical requirements. The strength of a solution which would kill germs in a sealed tube may not be equally efficacious when applied to a wound, where some is wasted, some evaporates, and the conditions of warmth and moisture, and of bulk of watery and solid matters, must be constantly varying. Experiments I made to test the value of peppermint oil were therefore devised so as to imitate as nearly as possible the conditions obtaining in wounds and under dressings. They were briefly carried out as follows:—

A. Small capsules containing—
(1) *a.* Fresh watery meat infusions,
(2) *b.* Egg-albumen in water,
(3) *c.* Vegetable (cauliflower) infusion,
were freely exposed to the air, the water being renewed as it evaporated.

B. Similar capsules were covered with—
(4) *a, b, c.* A layer of plain wet lint.
(5) „ A layer of lint soaked in olive oil.
(6) „ Lint soaked in olive oil, containing oil of peppermint, in proportions varying from 1 per 1000 to 1 in 100,000.

C. Similar capsules were exposed, covered with—
(7) *a, b, c.* Lint soaked in corrosive sublimate solution of several strengths.
(8) „ Lint soaked in alcoholic solution of iodoform.
(9) „ Lint soaked in alcoholic solution of iodine.
(10) „ Carbolised lint.
(11) „ Sublimate gauze (Hartman's), two layers.
(12) „ Carbolic gauze (four layers).
(13) „ Carbolic gauze (four layers), oiled.

D. Similar capsules containing fluids, to which were added—
(14) *a, b, c.* Corrosive sublimate in different proportns.
(15) „ Carbolic acid „ „ „
(16) „ Iodoform „ „ „
(17) „ Oil of peppermint „ „ „
(First dissolved in alcohol.)

E. A series similar to the last, but in which putrefied matter, from decaying intestines of a sheep, was added by dipping a platinum wire, so as to take a very small quantity only. (18, 19, 20, 21.)

F. Pieces of meat wrapped in several layers of—
(22) Corrosive gauze (1 in 1000),
(23) Carbolic gauze (1 in 40),
(24) Peppermint gauze (1 in 1000),
were exposed for a long period by themselves, and another series were placed on a heap of putrefying offal.

It would take too long to recapitulate the figures and results. I may state that the temperature (summer time) varied from 80° to 40° in the room; the materials were all prevented from drying up by application of ordinary well-water; and the infusions were not previously sterilised, so that the conditions of an open wound were as nearly as possible imitated.

The results were unchecked by cultivations, as I had neither time nor conveniences for them; but they were such as to prove to my mind the complete superiority of oil of

[1] Koch, quoted by Cornil and Babes: Les Bactéries, p. 48.
[2] Les Bactéries, p. 46: Agents chimiques de Destruction des Microbes.
[3] Guy's Hospital Gazette: Green Extracts, p. 9.
[4] "L'acide phénique, l'acide arsénieux, le pétrole ne tuent pas les bacilles" (of charbon): Warrikoff, quoted by Babes, p. 48. Of carbolic acid again: "In proportion of 1 to 5 per cent. its effect is neither sure nor lasting. Its efficacy as vapour is next to nothing." Ibid., p. 47.
[5] Mitth. d. k. gesundheitsamte, tome i., 1881. Quoted ibid.

peppermint over either carbolic acid, iodine, iodoform, or corrosive sublimate. When covered with a dressing of lint in olive oil the solutions decomposed at a later period in all cases, the decomposition taking place only after from sixteen days to three weeks in the case of the peppermint oil, while putrefaction was evident in Nos. 1, 2, 3, and 4 on the sixth day and in No. 5 on the seventh day. Of four specimens of No. 6 two never seemed to decompose; they were covered with lint and olive oil, containing 1 in 1000 of oil of peppermint, 1 in 10,000 smelt stale on the twenty-sixth day, 1 in 100,000 on the sixteenth. Usually the preparations had lost all odour of peppermint in three weeks.

Of those preparations *mixed with* various antiseptics—one, with iodoform, 1 in 50, certainly decomposed; one, with carbolic acid, 1 in 60, decomposed in twenty-four days; the corrosive sublimate solutions, 1 in 1000, 1 in 5000, 1 in 10,000, and the peppermint solutions, 1 in 1000, 1 in 2000, 1 in 3000, did not putrefy in three weeks; one of 1 in 5000 smelt stale in the fourth week. Of the gauze preparations, I found the peppermint gauze impregnable, and the piece of meat and fat placed in it was still quite sweet at the lapse of seven months, and after several re-exposures; the other gauzes failed—the carbolic gauze in the third week, the corrosive in the second.

The results, as might be expected, were very variable, and I do not offer such crude experiments as showing in what proportion exactly this drug may be trusted as an efficient germicide, but as proving undoubtedly that the oil of peppermint is, within limits of time, one of the strongest and most reliable of antiseptic agents. I have since used it in practice with most excellent results. Among the cases in which it has been the only antiseptic I have employed have been one of resection of a tuberculous knee joint (this case healed without any rise of temperature or any drop of pus; at six weeks from the operation the union was perfectly solid, and the patient has, since the eighth week, walked upon it without any other support); a removal of a large sebaceous cyst from the neck, not a single drop of pus being found, and healing being complete in four days by primary adhesion; an operation for strangulated hernia, after which no drop of suppuration occurred; and several minor operations, including a case in which many openings were made to relieve suppuration under the deep fascia of the whole of the forearm after a severe fall, and in which three six-inch-long drainage tubes were inserted; this case healed quickly without rise of temperature or any offensive character in the pus. For minor operations a preparation of olive oil, containing one drop of peppermint in an ounce, to soak the lint, is all that is required. I have also used a gauze prepared like eucalyptus gauze, and containing one part in 1000, with great satisfaction.

So completely does this antiseptic answer the purpose, that I did not hesitate to trust solely to its use in a case of removal of a sarcoma of the thigh, beginning in the glands along the femoral sheath (an operation performed only at the urgent request of the patient, who was sixty-eight years of age, and would not submit to amputation), and involving the dissection of the femoral artery and vein from the growth, from Poupart's ligament to Hunter's canal. The patient did not, however, rally from the operation. These operations were, of course, performed under favourable hygienic conditions in the country. But I have every belief that the usefulness of this antiseptic and its reliability will be still more triumphantly proved in town hospitals. It can be used in any strength, in any quantity, without any ill result to the patient. It should, therefore, be of especial value in abdominal operations. It is readily diffusible, but does not evaporate so speedily as to be rapidly exhausted. The gauze has retained the odour of it for nine months as freshly as when prepared. It is thus superior to corrosive, which does not come off from the gauze, so as to penetrate all parts of the dressing and the wound; and to iodoform, as its odour does not mask in any way that of any other discharges, as iodoform does. Not less valuable seems a special property it appears to have of checking suppuration, independently of its antiseptic tendency this way. As powerful as, but more penetrating and diffusible than, corrosive sublimate, absolutely harmless to the system in the largest doses, easily attainable, and readily prepared, oil of peppermint thus forms the best, safest, and most agreeable of all known antiseptics.

(To be concluded.)

CASE OF SUCCESSFUL LARYNGOTOMY FOR LARYNGEAL STENOSIS;

TUBE REMOVED AFTER TWELVE WEEKS' WEAR.

By C. H. WISE, M.D.

W. H. W——, aged thirty-nine, job-master, first came under my care in March, 1886. For some three months previously he had been suffering from "colds" with progressive hoarseness, which had gradually increased to absolute aphonia, and was associated with frequently recurring attacks of dyspnœa. These latter attacks had become more and more frequent until the condition had become almost permanent, and my patient closely resembled a sufferer from chronic asthma, having an anxious drawn look, being emaciated, and breathing in a noisy wheezing manner, calling into action all the extraordinary muscles of inspiration. He had gone to St. Leonards for some time, and the warmth there had seemed for a time productive of great relief, but eventually the dyspnœa had reasserted itself, and he felt that his condition was gradually but surely growing worse.

On laryngoscopic examination I found that the mischief lay in the glottis. The vocal cords were slightly congested, and the left had a flattened tubercle (?) growing on it at about the junction of the posterior and middle thirds of its length. But the most marked condition was that both cords were fixed in the position of phonation, whilst their anterior thirds seemed absolutely contiguous. There was thickening of all the surrounding parts, especially of the aryteno-epiglottidean folds, inside the left of which there was a well-defined, raised, whitish patch about the size of a split pea. There were no ulcers to be distinguished either in the larynx or on the epiglottis. It is possible that the growth mentioned on the left vocal cord may have been an ulcer seen in profile, but of this I could never satisfy myself, and there was certainly no inflammatory redness round it.

There was a history of syphilis some years previously, and, taking the whole of the circumstances into consideration, I felt justified in coming to the diagnosis of tertiary syphilitic inflammation, and I therefore at once put my patient on an anti-syphilitic treatment, giving him iodide of potash internally and rubbing in a mercurial ointment over the larynx. The latter had soon to be discontinued; indeed, my patient protested against mercury in any form, as, he said, formerly mercury "tore him all to pieces." Afterwards, however, he took the biniodide in gradually increasing doses, and, as the result proved, with great benefit. Notwithstanding this, however, the dyspnœa gradually increased, and the aperture of the glottis got narrower and narrower. The patient's health got worse from the confinement and the constant struggle to get his breath, and he had occasional alarming paroxysms after slight exertion or the slightest exposure to a draught.

On April 12th Mr. Lennox Browne saw the patient with me, and agreed as to the laryngoscopic appearances and the diagnosis, and also as to the probability of a resort to tracheotomy being necessary at any time. He arranged to see him again on April 16th to consider the expediency of this, but at 5.30 A.M. on the morning of that day I was hurriedly summoned, and found my patient *in extremis*, unconscious, his face purple, and a copious perspiration rolling off his forehead, whilst he gave an occasional laboured gasp. I had fortunately brought my pocket-case and a tracheotomy tube with me, and I therefore lost no time in opening a passage into his lungs by doing a laryngotomy. I made a longitudinal incision over the crico-thyroid space, and then a horizontal one through the membrane, and got the tube in as soon as possible; but, rapid though this proceeding was, breathing had ceased, and I had to resort to artificial respiration for a few minutes, when the natural efforts were resumed by degrees. There was a good deal of hæmorrhage, which ceased as the veins about the neck became relieved of their turgid condition; and as consciousness gradually returned a few spasmodic coughs brought up some blood that had evidently run down the trachea. I had still enough to do to keep the tube clear of blood clot, to arrange for steam kettle and other details, until the hospital nurse, for whom I had telegraphed, appeared on the scene and relieved me.

During the next few days we had constant alarms by the tube getting blocked, principally by small masses of hardened blood and mucus. I believe some of the blood that got into the trachea coagulated on the walls, got

hardened, and was only gradually dislodged by the mucus gathering round it. On the fourth day the steam kettle, heated by a spirit lamp, got upset, and the carpet and curtains being quickly in a blaze, my patient and nurse had to hurriedly decamp into another room whilst the fire was got under. Still, despite these adventures, we had no lung or other complications. Mr. Lennox Browne, when he saw my patient after the operation, suggested the danger of necrosis of the cartilages from the already existing perichondritis, coupled with the pressure of the tube in its somewhat cramped quarters in the crico-thyroid space, and hence feared that a further operation of tracheotomy might still be necessary to avoid this danger. But the tube, an ordinary bivalve, was well borne, and my patient soon learned to accommodate it for himself until it was comfortable. Meanwhile, I pushed the anti-syphilitic treatment, and after a fortnight believed I saw a slight increase in the patency of the glottis, which was gradually changed to a certainty, as the cords were evidently slightly mobile, the thickening of the surrounding parts diminished, and the gummata (?) got smaller and disappeared. I tried several other tubes as substitutes for the bivalve, but until I got some soft rubber ones my patient expressed a decided preference for the original bivalve. Getting one of the soft rubber tubes that was comfortable, I cut an opening on the convexity, so that he could by stopping the external opening breathe through the larynx. This was on May 26th; but it was only by very slow degrees that my patient could be convinced there was any increased patency in the laryngeal opening; but by plugging it for half an hour or so at a time he gradually acquired confidence, and eventually we kept it plugged for hours together. On July 6th I finally removed the tube, which thus (with its predecessor) had been worn for nearly twelve weeks, and the wound healed in a few days with simple dressing. The cords had then resumed quite two-thirds of their normal range of mobility, and though the voice was still somewhat hoarse, there was perfect ease in breathing. Now (February, 1888) my patient is stout and hearty, and has a fairly normal larynx, with a scar over the seat of the operation that is hardly perceptible.

It seems to me that the case is worthy of record from the success of an operation performed *in extremis* and without any assistance, and from the fact that, contrary to the usual history of syphilitic stenosis of the larynx, the stenosis disappeared under treatment, and the tube which had saved the patient from suffocation could be safely dispensed with after three months' wear.

OLD FRACTURE OF BOTH PATELLÆ;

FORMATION OF BONE IN THE LIGAMENTOUS UNION.

BY HERBERT W. PAGE, M.A., M.C. CANTAB.

A MAN, aged fifty-three, who was recently under my care in St. Mary's Hospital because of a self-inflicted throat wound, was the subject of old fracture of both patellæ, in which distinct bony formation was to be felt in both the ligamentous bonds between the widely separate fragments. The condition observed is so unusual that the facts seem worthy of record. They are as follows:—*Right* patella: Broken thirty-three years ago; simple transverse fracture by muscular violence; fragments separated two inches, and connected by distinct ligament of the usual character. In the centre of this ligament is a portion which is much harder than the rest and moves with it, and gives the impression of a small piece of bone having been let into it. This harder, or osseous, piece is of the same width as the ligament, and measures about a quarter of an inch from above downwards. The condition is not nearly so obvious in this leg as in the other; and, indeed, it may be doubted whether it would have been possible to tell what it was, had not the nature of that in the left leg been quite unmistakable. *Left* patella: Broken thirteen years ago; simple transverse fracture by muscular violence. Hasty examination would lead to the idea that the patella was broken into three pieces; but a more careful investigation shows that the upper and lower fragments are of the usual character, the upper portion being rather larger than the lower, and the two together being sufficient to form a patella somewhat above the usual dimensions. These fragments are clearly united by ligament, in the centre of which—or to be more exact, an inch and a half below the upper fragment and an inch above the lower—is a distinct bone formation, of the same width as the ligament, and freely incorporated with it, feeling like a flat plate of bone laid upon or let into it, and measuring nearly half an inch from above downwards. There could be no doubt that it was bone, for lateral compression had no influence in diminishing its width, as in the case of the true ligament. Nothing in the feel of the fragments of either patellæ, of their surfaces or margins, led to any suspicion of the bones having been originally broken into three pieces; nor did the history suggest any other cause than muscular violence for the injuries. In both instances the man had been in hospital about six weeks, and both times had left with his leg put up in starch. That was all he could tell us as to treatment.

I have examined, as probably have most surgeons, a large number of old patellar fractures, but have never met with anything of the kind before, nor in many works consulted have I been able to find the description of any like thing. In a recent paper by Ollier of Lyons on Resection of the Knee,[1] is the record of a case of excision of the knee in which the patella was removed after completely detaching it from its periosteum, and we read in the account as follows: "Une particularité curieuse à signaler c'est qu'il s'est reformé une nouvelle rotule dans la gaine périostique conservée. Cette rotule est sensiblement aussi large, mais moins épaisse que celle du côté sain." The curious circumstance of Ollier's case is surpassed by the curiosity of my own, and it is difficult to say by what tissue the new bone had been formed. Hardly by periosteum, for, even if some periosteum had been stripped off, it seems altogether unlikely that pieces of it could have become so detached as to lie in the positions occupied years after by these plates of bone. Not from bits of the patellæ themselves, for it is inconceivable that muscular violence could have rent each of the bones into three fragments. Were the plates formed by some unwonted effort of nature towards bony union, instead of the ligamentous union with which widely separated fragments of broken patellæ have usually to be content? It is strange, if so, that the effort is so rarely made, and in asking the question, and, indeed, in an appeal to nature, there lies a confession of inability to account for the *particularité curieuse* met with in this case, which may be of interest to others besides those who saw it in St. Mary's Hospital.

NOTE ON THE ORDER OF ADMISSION OF LUNATICS TO ASYLUMS.

BY J. A. CAMPBELL, M.D., F.R.S.E.,
SUPERINTENDENT OF THE COUNTIES ASYLUM, CARLISLE.

LAWYERS, as a rule, draw up our laws, and do so after their own fashion; and they cannot be reasonably blamed for doing so. They make all that they have to do with wordy, and no doubt accurate; but, unlike medical men, much that lawyers have to do, and to do with, can be done by their subordinates. They are able to get all their details filled in by clerks, whom they pay at a low rate, and they are able to charge as if the work was done by themselves. Now, except in some very exceptional posts, medical men have to do the work that they charge for themselves, and it would be greatly for their interest if in all matters where their duties take legal form in writing that repetition should be avoided, that a minimum of legal formality of description and designation should, where consistent with accuracy and legality, be the rule, not the exception.

It is probable that a Lunacy Amendment Act will during this session come before Parliament, and as the order of reception of lunatics must necessarily be included in the measure, I think it not at all uncalled for at this juncture to make some remarks on the order which has hitherto been in force, to offer some suggestions, and to give a sketch form of what appears to me would not only fulfil all legal requirements, but lessen trouble and avoid the present numerous pitfalls for errors, omissions, and misstatements which may so readily result from the form in which the present order is couched. I think this matter is of such importance that medical men should discuss it at some of the Medical Societies, and should indicate to the legal authorities their views on the subject. I shall have done my part in directing attention to it, and in shortly discussing the following:—

[1] Revue de Chirurgie, 1887, p. 607.

1. The present admission order: its chief faults. 2. Medical certificates: my experience of them. 3. A sketch form of admission. It is unnecessary for me to go into details as to the difference between the order for the reception of a pauper and private patient. Suffice it to say that a relative signs the order of detention in the latter case instead of a justice, and that two medical certificates are necessary instead of one, as in the case of a pauper, but the medical certificates are on the same form, and, with the exception of the words "separately from any other medical practitioner," it is identical with what is required in the pauper case.

1. *The present admission order* of a pauper lunatic begins with the justice's order, and this cannot be signed till all the rest is filled in and dated. It necessarily contains ten written words besides the signature, date, and direction. The statement so far as it goes is very good, though it might with advantage contain one or two more particulars. The form of medical certificate is clumsy, intricate, and involves repetitions. In filling up the form, even before giving the certificate which contains the facts indicating insanity, at least thirty-two words have to be written, and, from the mode in which the form stands, numerous loopholes for omissions and errors seem to present themselves to practitioners.

2. *Medical certificates.*—In the Carlisle district I think the medical men are specially well educated, are careful and accurate, and do not willingly cause more trouble than they can help, yet a very considerable proportion of the orders of admission have been returned by the Commissioners in Lunacy, even last year, owing to omissions, such as want of accurate statement of qualification or some slight omission in the filling up of details concerning the patient. On the whole, I may say it is rather rare in the Carlisle Asylum to have certificates returned owing to want of matter indicating insanity, and when such occurs it usually is in the case of young inexperienced medical men who have not taken advantage of the opportunities now open to them at most of the chief schools of medicine. The most striking instance of this nature that occurred during 1887 was the following. A female patient was admitted in a state of undress and excitement, which would easily allow of such a proper description of her appearance, manner, conduct and behaviour as would satisfy the most critical judge of a medical certificate, and I am led to believe her state when examined was in all particulars the same as when I saw her first, yet the young medical man who certified the case could only, under the facts indicating insanity observed by myself, insert "She will not answer any questions." Of course this certificate had to be returned to this medical man for amendment. I certainly think a patient would have good grounds for an action at law against a medical man for sending him to an asylum on such a certificate. So much did this strike me that I wrote to the Commissioners in Lunacy on the subject, and brought it before the Committee of Visitors of the Asylum, to prevent myself from being implicated. Were it of moment, I could give the percentage of orders returned during the past year for correction and amendment. Each costs fourpence in postage and gives trouble to asylum officials; but I really feel that most of the causes for which orders are returned for correction are the result of the clumsy, intricate, and unnecessarily formal mode in which this document is drawn up, and that an effort should be made by the profession to have the order drawn up in a more sensible and more simple form. In England every year more than £13,000 is expended in lunacy certificates; and the time has surely now come when the study of insanity should be required for a licence, and the capability of writing a lunacy certificate made a test in examinations. I sketch out what appears to me would fully meet the legal requirements, would contain all that the present form contains, and yet would not need nearly so much filling up, or present so many opportunities for either omissions or mistakes.

3. *Sketch form of order of admission.*—1st. Statement containing particulars of patient and full designation as it at present stands in order. 2nd. Medical certificate. Form altered to following:—

"I, the undersigned, being a registered practitioner of medicine, hereby certify that I, on the day of , 188 , personally examined , concerning whom all particulars are given in the above statement. I consider him to be of unsound mind, and a proper person to be taken charge of and detained under care and treatment in an asylum. I have formed this opinion on the following grounds—viz.: (1) Facts indicating insanity observed by myself; (2) other facts (if any) indicating insanity communicated by others.

"Signed _____
Registered qualification _____
Registered address _____
Date _____."

3rd. Magistrate's order of reception and detention. It is last signed, and should follow the others:—

"To Asylum.

"I, the undersigned, direct you to receive the above-named and described , whom I have personally examined, as a patient into your asylum, particulars concerning whom are contained in the foregoing statement and medical certificate.

"Signed _____
Qualification _____
Date _____."

Clinical Notes:

MEDICAL, SURGICAL, OBSTETRICAL, AND THERAPEUTICAL.

ANOREXIA NERVOSA.

BY SIR WILLIAM GULL, BART., M.D., F.R.S.

IT may interest the readers of THE LANCET to look at the accompanying wood engravings, which were made from photographs of a case of extreme starvation (anorexia nervosa) which was brought to me on April 20th of last year by Dr. Leachman, of Petersfield. Dr. Leachman, was good enough subsequently to send me the following notes; and afterwards, at my request, the two photographs, taken by Mr. C. S. Ticehurst, of Petersfield. The case was so

Photographed April 21st, 1887.

extreme that, had it not been photographed and accurately engraved, some assurance would have been necessary that the appearances were not exaggerated, or even caricatured, which they were not.

Miss K. R——, aged fourteen, the third child in a family of six, one of whom died in infancy. Father died, aged sixty-eight, of pneumonic phthisis. Mother living, and in good health. Has a sister the subject of various nervous symptoms, and a nephew epileptic. With these exceptions, there have been no other neurotic cases on either side in the family, which is a large one. The patient, who was a plump, healthy girl until the beginning of last year (1887),

began, early in February, without apparent cause, to evince a repugnance to food; and soon afterwards declined to take any whatever, except half a cup of tea or coffee. On March 13th she travelled from the north of England, and visited me on April 20th. She was then extremely emaciated, and persisted in walking through the streets to my house, though an object of remark to the passers-by. Extremities blue and cold. Examination showed no organic disease. Respiration 12 to 14; pulse 46; temperature 97°. Urine normal. Weight 4 st. 7 lb.; height 5 ft. 4 in. Patient expressed herself as quite well. A nurse was obtained from Guy's,

Photographed June 14th, 1887.

and light food ordered every few hours. In six weeks Dr. Leachman reported her condition to be fairly good; and on July 27th the mother wrote: "K—— is nearly well. I have no trouble now about her eating. Nurse has been away three weeks." This story, in fine, is an illustration of most of these cases, perversions of the "ego" being the cause and determining the course of the malady. As part of the pathological history, it is curious to note, as I did in my first paper, the persistent wish to be on the move, though the emaciation was so great and the nutritive functions at an extreme ebb.

CASE OF

STRANGULATED INGUINAL HERNIA UNACCOMPANIED BY LOCAL PAIN.

By JAMES SHAW, M.B. GLAS.

THE case of strangulated femoral hernia narrated by Mr. Oscar B. Thelswell in your issue of Jan. 14th, and the following case, for permission to publish which I am indebted to the courtesy of Dr. Arrol, may serve a useful purpose if they emphasise and enforce the fact that cases of strangulated hernia may, and do, occur without manifesting local symptoms sufficient to excite suspicion or alarm. Indeed, cases are on record where patients have been in ignorance that they suffered from hernia, and the surgeon was prompted to examine for strangulated hernia by the general condition of the patient. We know that it is true generally that in large herniæ or herniæ accompanied by omentum the pain is not severe. In this case the hernial protrusion was small and there was no omentum. I am disposed to attribute the absence of pain in the tumour to the age of the patient, the feeble condition of her health, the presence of a considerable amount of serum in the sac, and to the comparatively slow development of symptoms.

Mrs. T——, aged fifty-two, a delicate woman, mother of three children, has for three years suffered from rupture, for which she wore a truss during the day. It caused her no trouble, and she paid little attention to it. On the morning of Dec. 21st, 1887, it came down as she was getting out of bed. It had often come down before, and on this occasion she took no notice of it, as was her custom. Some hours afterwards there was a light movement of the bowels, and she began to experience pain in the region of the umbilicus. Towards evening she was sick and vomited some bilious matter. The sickness and pain gradually grew worse till the following Saturday, on which day I saw her with Dr. Arrol. She was anxious and somewhat weak, but only slightly depressed. Pulse 96; temperature normal. The vomiting continued, and had begun to acquire a slightly fetid odour. There was thirst, but the urinary flow was normal. Constipation was absolute, and no flatus was passed. In the right groin there was a tense tumour of the size of an orange, dull on percussion, with no perceptible impulse on coughing. Free manipulation and the moderate pressure that was used did not elicit any complaint of pain or tenderness. The fixed pain about the umbilicus continued, and there were paroxysms of pain of some severity along the line of the transverse and descending colon. A gentle, patient trial of taxis was made, but proved unsuccessful. It was then decided to perform herniotomy, but as the symptoms were not urgent the operation was postponed till the following day (Christmas Day), and local applications were ordered. Dr. Arrol operated in the presence of Surgeon-Major Hare, A.M.S., and myself. Though the patient suffered from marked aortic and mitral disease, she took the A.C.E. anæsthetic very well. On opening the sac, about four ounces of straw-coloured serum escaped, free from all offensive odour. The gut was without adhesions, and measured three inches in length. It was very dark in colour, but still firm and elastic, and no signs of inflammation were visible. There was a tight constriction at the external ring, and on this being divided the hernia was easily reduced. The sac was ligatured high up and excised, and the operation was completed in the usual way. The subsequent course was all that could be desired. The temperature was never more than fractionally elevated; the bowels were moved spontaneously on the third day, and she made a good recovery.

STRANGULATED FEMORAL HERNIA, WITH ENTIRE ABSENCE OF LOCAL PAIN.

By EDWIN SIMPSON, L.R.C.P. & S. EDIN.

THE subjoined case will be of interest, following, as it does, on that quoted by Mr. O. B. Shelswell, in THE LANCET of Jan. 14th last, under the above heading.

Mrs. A——, aged forty, of a delicate constitution, with a history of irregular action of bowels for some time, having undergone unusual exertion in lifting a quantity of coal, noticed a couple of days afterwards a small swelling in the left groin, which gave no inconvenience, and which did not disappear at any time. A week later she complained of nausea and vomiting, and sought medical advice. On Jan. 18th I attended the patient for my principal, Mr. Sers, who saw the patient throughout the treatment. I found, on examination, a small tumour in the left groin, which the patient allowed to be manipulated in every way without the slightest symptoms of pain, although she had the usual griping pains of abdomen and around the umbilicus. She vomited everything taken. Opium and enemata were used, which brought away a large mass of scybalæ. She gradually became worse, and on the sixth day stercoraceous vomiting set in, requiring urgent operative

interference. Mr. Wright of Nottingham, cut down and relieved a very tight stricture. To the inside, and close to the knuckle of gut, lay an enlarged gland, which helped to complicate the diagnosis in the first instance. The parts never recovered themselves, and the patient succumbed eight hours after the operation.

THE EFFECT OF TIGHT LACING UPON THE SECRETION OF BILE.

By W. J. COLLINS, M.D., M.S., B.Sc. LOND.,
GOLD MEDALLIST IN PUBLIC HEALTH, FELLOW OF THE ROYAL COLLEGE OF SURGEONS OF ENGLAND.

THE evil effects and visceral deformities apt to supervene upon habitual restriction of the lower ribs have been the theme of innumerable lecturers and scribes. If warning and denunciation were operative, waists like that of the Venus of Milo would be neither few nor far between; but fashion cares little for the preaching of pathology, and, still regardless of the facts of anatomy, looks to the wasp for the ideal of what the nexus between thorax and abdomen ought to be. The effects of cramping the chest movements upon lungs and heart, liver and stomach, and the rest, have been for the most part described in vague and indefinite generalisations. Some recent observations I have made appealed so emphatically to my mind that I venture to think their publication advisable.

In the course of a series of observations upon the secretion of bile, which I have undertaken at the instigation of Dr. Lauder Brunton, I had occasion to make biliary fistulæ upon several anæsthetised guinea-pigs. I was very soon struck by the considerable effect which respiratory movements had upon the passage of bile along the cannulæ. With each descent of the diaphragm there was advance of the column of bile, and with each expiration a slight retrogression or arrest of advance. Moreover, powerful respiratory exertion considerably augmented the outflow, and even the slightly accelerated respiration which accompanied the administration of ether was not without its distinct effect. It occurred to me to see what would be the result of placing a constricting band around the lower part of the thorax. I accordingly selected a guinea-pig in which the biliary discharge from the cannula was free and in full quantity, and I collected the amount of bile secreted at regular intervals until a fair average could be obtained. I then tied a tape band about one inch wide round the guinea-pig's waist (if such, by courtesy, can be allowed to exist), reducing the circumference thereof from five inches and a quarter to four inches, but not so as to cause any formidable risk of dyspnœa. After collecting the bile secreted at stated intervals, I removed the "stays" and again collected as before. I found that before the tight lacing began bile was being secreted at the rate of 8·4 cub. cents. per hour; during the tight lacing this fell to the rate of 4·5 cub. cent. per hour, and after the removal of the constriction again rose to 7·8 cub. cent. per hour. I repeated the experiment in other animals with the same result; so that it would appear that by reducing the circumference of the lower part of the thorax by about one-fourth, the bile secretion is reduced about one-half. It is useless to assert that it is bile expulsion, not bile secretion, that we are dealing with here, for the bile being secreted at a pressure very slightly above that of blood pressure, the mere presence of bile in the canaliculi is to some extent detrimental to secretion behind it; whereas the rapid evacuation of the bile channels, which free diaphragmatic movement ensures, is salutary to increased elimination of bile.

The free and unfettered action of the diaphragm, then, is essential to normal biliary secretion, and effects evacuation of the bile ducts much in the same way as succussion of the liver which saddle exercise affords, and which led Sydenham to opine that "the outside of a horse is the best thing for the inside of a man." This being so, what must be the effect of chronic restraint in those whose waists are for ever "cabined, cribbed, confined" by corsets with clasped steels and constricting laces? It is such as we might anticipate and have often seen, and the above merely points our knowledge and makes it more precise. Deficient bile, dyspepsia, sickness, constipation, clayey stools, headaches, chlorosis, debility, form a natural sequence, and one far from unfamiliar. Alas, the remedy is too simple to be thought worthy of consideration, too much within the patient's own control to run a chance of being carried out. For *of course* no woman ever yet tight laced herself; habit has become so much a second nature, the ideal wasp waist so ingrained in the sex, so intensified by inheritance, that there is much of *bona fides* in the invariable disclaimer. Be it so. If no woman "pinches" she will not object to employ elastic laces, which at best in her case will be a superfluity, and may not improbably permit a reversion to the waists of the Capua and Canova along with a measure of relief to the liver and its secretion.

SPONTANEOUS EVACUATION OF A LARGE GALL-STONE.

By W. H. JOHNSON, M.R.C.S.

ON Feb. 2nd of this year I was called in to see Mrs. G——, aged fifty-nine, an old patient of mine, whom I had frequently attended for attacks of syncope and other symptoms dependent on fatty heart. The messenger described her as having been seized with most intense pain and vomiting, the attack coming on suddenly after dinner, which the patient had enjoyed as usual; in fact, she was stated to have been quite well up to the moment of attack. Having ascertained there was no hernia, I gave a hypodermic injection of ether, ordered a hot poultice to be applied to the abdomen and a clyster of warm soap-and-water to be administered. I abstained from giving opium for the time being. In two hours I saw her again, and found her still in constant pain, with exacerbations, but no marked tenderness; bilious vomiting; the collapse not so extreme; no sign of jaundice on the skin or conjunctiva; and, as I had previously ascertained, constipation since the preceding evening. I injected one-third of a grain of morphia subcutaneously, which dulled the pain somewhat.

I need not go through the progress of the case. For the next two or three days it presented all the phenomena of acute intestinal obstruction; the symptoms were treated on general principles, and the strength maintained, as well as could be, by nutritive enemata and small quantities of iced champagne. On the evening of the third day I could feel distinctly, and called the attention of the attendant to, a rounded mass at the left and slightly below the level of the umbilicus; the pain continued very intense and the vomit suspicious. On the morning of the fourth day the substance was not perceptible, the obstruction was as complete as ever, the pain as acute, especially in the right iliac region, and the vomit unmistakably fæcal. The temperature, which had hitherto been rather below the normal, rose to close on 99°. At 8 A.M. on the fifth day the patient expressed herself as feeling much easier, and the vomiting was less frequent; she looked altogether brighter, and had slept a little. About 3 P.M. a semi-liquid motion was passed, and the bowels acted again twice between that time and 8 P.M., when with the last stool, after some straining, a large stone was expelled with considerable force into the bedpan. I had asked them to keep all that passed for inspection. At the next visit the patient was much better, although the stomach remained very irritable. A rather severe attack of enteritis, which kept the patient in bed a month, delayed the convalescence, but she is now quite well. The stone is round, tuberculated on the surface, non-facetted, and measures 3⅜ in. in circumference.

The noticeable points in this case are as follows:—1. The size of the stone. 2. Its passage, as proved by the symptoms, by ulceration direct from the gall-bladder to the duodenum being unmarked by any previous pain or inconvenience. This is, I imagine, uncommon, although Mr. Treves, in the Jacksonian prize essay of 1883, says: "In several cases the establishment of a fistulous communication between the gall-bladder and the duodenum appears to have been effected without producing any noticeable symptom." 3. The probability, as I take it, of having felt the stone in the small intestine through the abdominal wall, and being able, by the symptoms caused, to trace it to its temporary stoppage at the ileo-cæcal valve. I certainly felt much more satisfied after the disappearance of the tumour, and am pretty well assured that it was the stone on its travels.

A Mirror OF HOSPITAL PRACTICE, BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Procemium.

MIDDLESEX HOSPITAL.

COMPOUND DEPRESSED FRACTURE OF RIGHT PARIETAL BONE; PARALYSIS OF LEFT UPPER LIMB; TREPHINING; RECOVERY, WITH COMPLETE RESTORATION OF USE OF LIMB; REMARKS.

(Under the care of Mr. HENRY MORRIS.)

THE chief interest in this case is the affection of the left upper extremity produced by the pressure of the fragments of bone on the right side of the brain, and the difficulty in arresting the hæmorrhage from the vessels of the dura mater. The complete recovery of the arm took place in about three weeks, the improvement commencing a short time after the removal of the pieces of bone from the region of the motor area. For the notes we are indebted to Mr. W. G. Nash, house surgeon.

J. L——, aged thirty, a bricklayer's labourer, was brought to the hospital on Oct. 26th, 1887, at 4.30 P.M., and was able to walk into the surgery, with a history that a quarter of an hour previously an iron bucket weighing 15 or 18 lb. had fallen a distance of twenty-five feet and struck him on the head. He was unconscious for a few minutes, and on regaining consciousness found his left arm and hand numb and powerless.

On examination, there was a scalp wound four inches long, commencing half an inch to the right of the middle line of the skull, one inch beyond a point midway between the root of the nose and the external occipital protuberance, and extending downwards and forwards on the right side to a point three inches and a half vertically above the external auditory meatus. The anterior flap had been torn up from the bone beneath, so that the finger could be passed three-quarters of an inch forwards beneath it. On introducing the finger the parietal bone was felt to be extensively fractured, and a depression was felt in the bone a little in front of the central point of the scalp wound. The bone was depressed a quarter of an inch anteriorly, and gradually shelved posteriorly. There was a considerable amount of hæmorrhage from the wound. The patient was conscious, but did not remember the accident. The pupils were equal, and the left reacted more sluggishly than the right. There was no bleeding from the ears, nose, or mouth. There was almost complete loss of power in the extensor muscles of the left hand, forearm, and arm, but the flexors were not so much affected. Sensation was much diminished, and the limb felt colder than on the opposite side. The left leg did not appear to be affected, except that ankle clonus was obtained. Pulse 84, full, strong, and regular. Respiration normal. Skin warm and dry.

Operation.—At 5.45 the same day, patient being anæsthetised, Mr. Morris enlarged the scalp wound by prolonging the upper and lower ends forwards, and forwards and downwards respectively, so as to convert it into one of crescentic outline with the concavity forwards. All superficial hæmorrhage was then stopped, the bone bared of pericranium, and a three-quarter-inch trephine applied on the edge of the bone overhanging the depressed portion. On removing this piece of bone considerable hæmorrhage was found to be proceeding from a wounded posterior branch of the middle meningeal artery. Numerous splinters of the inner table of the skull were extracted. A half-inch trephine was next applied at the edge of the bone to the outer side of the first application, and the removal of this piece allowed more splinters to be got away and the depressed bone to be elevated. The dura mater was not wounded. Hæmorrhage still continuing from a posterior branch of the middle meningeal artery, which could not be got at to ligature, an attempt was made to stop it by compression with a sponge. This failing, the edges of the scalp wound were brought together with silk sutures, a drainage tube inserted, the wound dusted with iodoform, and moderate compression applied by means of a dressing of boracic charpie, cotton wool, and bandage. The patient was returned to bed, an iced-water coil applied to the head, and one drachm of liquid extract of ergot and one drachm of liquor morphiæ were injected into the rectum; one drachm of the former to be repeated every four hours. Liquid diet was ordered.

Oct. 27th.—Dressing soaked through; changed. Hæmorrhage had ceased. Sensation and power in hand and arm distinctly better. Temperature normal; pulse 80.

29th.—Ergot omitted.

30th.—Wound dressed; drainage tube omitted. Pulse 56; temperature 98°.

Nov. 1st.—Wound dressed; looking well. Pulse 48; temperature 97·6°. More sensation and power in hand and arm.

8th.—Stitches removed. Ice gradually removed from coil. Pulse 72.

9th.—Coil omitted. Allowed bread.

15th.—Wound quite healed. All dressings removed. Almost complete recovery of power in hand and arm. Fish diet ordered.

20th.—Got up to-day. Slight numbness of the left little finger remains. No perceptible loss of power in the left hand or forearm. To have meat diet.

Dec. 2nd.—Went to Eastbourne Convalescent Home.

Jan. 31st, 1888.—Came to see Mr. Morris. The patient looking strong and well. Scar quite firm. Some depression can be felt where the trephines were applied, but the openings in the bone are closed with very hard tissue. Has done some work during the last fortnight. No loss of sight since the accident.

Remarks by Mr. HENRY MORRIS.—It rarely happens that an accident of so serious a character furnishes so simple a physiological experiment as in this case. It will be observed that the direction of the wound corresponded pretty accurately with the fissure of Rolando, being probably a line or two posterior to that fissure, and the most depressed part of the fractured bone was over the upper and middle parts of the ascending frontal convolution and the posterior extremity of the middle frontal convolution. The only nerve symptoms were paralysis of motion, impaired sensation, and diminished heat of the left upper extremity; the loss of power in the extensors of each segment of the part being much more marked than in the flexors, and, indeed, well-nigh complete. The case therefore affords very striking confirmation of the conclusions arrived at by Dr. Beevor and Mr. Victor Horsley from their experiments on monkeys. It shows that the motor area of the upper limb, more particularly as concerns the extensor group of muscles, is situated in the middle part of the ascending and the posterior fourth of the middle frontal convolutions. The experiments referred to, and the cases of tumour of the brain which have been operated upon, have demonstrated movements of the limb from irritation of the hemisphere, whilst this case shows paralysis of the same muscles from pressure on the hemisphere. The rapid recovery of the motor power of the limb after the elevation of the depressed bone and the removal of the numerous splinters of bone is very noteworthy. The next morning there was considerable return of power, and within a day or two the patient could raise his arm full length off the bed, but it was nearly three weeks before he could be said to have quite recovered the full power of the limb. The hæmorrhage from within the skull was very free during the operation, and the blood, coming as it did from beneath the bone, could not be stopped by pressure or forceps. Before submitting him to a further use of the trephine with the view of exposing the bleeding vessel, I resolved on fastening the flap of skin over the dura mater and applying light elastic compression over the integument, at the same time inserting a drainage tube, so as to prevent undue accumulation of blood and pressure upon the dura mater. This, together with the administration of ergot, was soon, fortunately, followed by complete cessation of bleeding, and the man made an uninterrupted recovery.

ROYAL INFIRMARY, NEWCASTLE-ON-TYNE.

CASE OF SUPRA-PUBIC LITHOTOMY, IN WHICH THERE WAS FOUND AN UNUSUALLY NARROW "SUPRA-PUBIC INTERVAL"; REMARKS.

(Under the care of Dr. HUME.)

JAMES P——, aged eighteen, a pitman, was admitted on May 22nd, 1887. He had suffered from symptoms of stone

in the bladder for eight years. On admission, his urine, which was muco-purulent, was constantly dribbling from him, and the bladder was firmly contracted on the stone.

On May 27th supra-pubic lithotomy was performed. The rectal bag was distended with eleven ounces of water, and an equal quantity of boracic solution injected into the bladder. The form of the bladder then stood out prominently between the pubes and umbilicus. The usual incision and dissection were made, and when the surface of the bladder was reached the fold of peritoneum was recognised a little more than a quarter of an inch above the pubic margin. Additional space was gained by separating and pushing up the peritoneum with the handle of the knife, and the operation was completed without difficulty. A single stitch was placed in the upper angle of the wound; the lower part of the wound and the wound in the bladder wall were left open, and a tube was inserted in the bladder. The stone was a mulberry calculus, with thin phosphatic coating, and weighed half an ounce.

On the day after the operation there was a good deal of abdominal distension and pain, with vomiting, and anxious expression of countenance. A grain of opium in pill was given at intervals, and these threatenings of peritonitis subsided. The temperature did not rise above 100·5°. For the next six days the temperature remained at or below 99°. All the urine escaped by the wound. On the seventh day after the operation the patient passed urine by the urethra, and the temperature ran up to 102°. All the symptoms of rather aggravated urinary fever developed and continued for four days, during which time the urine in part escaped by the wound, and in part was passed by the urethra. The wound had been closing, but reopened during this feverish attack, so that at the end of the four days all the urine again passed by the wound. The temperature on the same day fell to normal, and the patient continued free from fever, until again at an interval of seven days he passed urine by the urethra. Notwithstanding regular washings of the bladder with bichloride of mercury solution, this condition of urinary fever remained until some time after closure of the wound, which was complete on July 3rd.

Remarks by Dr. HUME.—Risk of injury to the peritoneum is so evidently one of the chief dangers attending the high operation for stone, that an instance of unusually low position of the peritoneal reflexion, even after full distension of both bladder and rectum, seems worthy of record. The two points in the history of this case which are worthy of note are the narrowness of the supra-pubic interval and the threatening of peritonitis, which seemed to be the consequence of the necessary interference with the peritoneum; and secondly, the evidence of imperfect drainage of the bladder in the setting up of fever so soon as the contraction of the wound led to the passage of urine by the natural channel. It would seem that as regards drainage throughout the process of healing the high operation is at a disadvantage compared with perineal lithotomy.

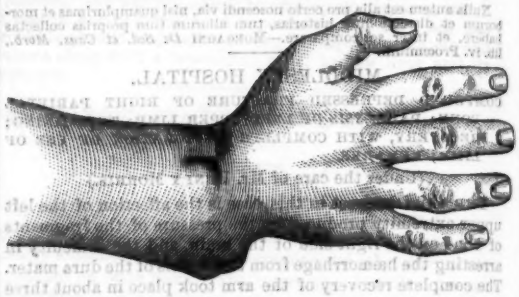
LEEDS GENERAL INFIRMARY.

ARREST OF DEVELOPMENT OF THE RADIUS FOLLOWING INJURY; RESULTING LUXATION OF THE HEAD OF THE ULNA; REMARKS.

(Under the care of Mr. W. H. BROWN.)

THE following notes are by Mr. B. G. A. Moynihan, M.B. Lond., house surgeon.

A. W——, a boy aged ten years, was admitted in June, 1880, under the care of Mr. Edward Atkinson, he having fallen from a two-storeyed house upon his face and right arm. He was unconscious. There were several severe wounds upon the face; the right wrist was swollen, but there was no displacement of bones and no fracture. He was discharged well after two weeks, being able to move his wrist freely and without pain. There was no alteration in the shape of the wrist at that time. Two years later, his mother first noticed a "lump" on the wrist, but as the boy had no pain she did not consult anyone. The deformity gradually increased, and on Feb. 6th of the present year she brought him to the out-patient room. On examination, the head of the ulna of the right side was found to be dislocated inwards and somewhat backwards; the movements of the joint were but little interfered with; the radius was in its normal position, and practically unchanged in contour. On measurement the radius of the affected side was found to be one inch shorter than its fellow, whilst the length of the ulna on the two sides corresponded. The accompanying sketch made by Mr. H. A. Smith shows well the deformity as it exists.



Remarks by Mr. BROWN.—So far as I know, the recorded instances of such a condition as the foregoing following an accident are but few. I have met with but one other where the radius almost entirely disappeared after a blow, leaving but the upper and lower epiphyses. The injury in the present case was a very severe one, and it would seem probable that the lower epiphysis of the radius was impacted, and that as a result ossification followed, whilst the ulna has continued to grow in the ordinary way. The observations as to measurement seem to suggest that the growth (in length) of the bones of the forearm depend in great measure, if not entirely, upon the lower epiphysis.

Medical Societies.

ROYAL MEDICAL & CHIRURGICAL SOCIETY.

Old Dislocation of Humerus treated by Excision.—The Thyroid Gland.

AN ordinary meeting of this Society was held on Tuesday last, March 13th, Sir E. H. Sieveking, President, in the chair.

A paper was read by Mr. MARMADUKE SHEILD on a case of neglected Dislocation of the Humerus, followed by Paralysis of the Nerves of the Hand and Forearm, treated by excision of the head of the humerus. The patient was a man aged forty-five, who was admitted into Charing-cross Hospital on September 2nd, 1887, suffering from a subcoracoid dislocation of the left humerus of twelve weeks' duration. There had been much swelling and severe pain after the accident. Signs of implication of the median and ulnar nerves were marked, the hand being almost useless; the radial pulse was also diminished in force. Moderate attempts at reduction under ether failed to move the head of the bone, which seemed fixed. Excision was therefore performed, and the head of the humerus removed at the level of the anatomical neck. Rapid recovery ensued, and twelve weeks after the operation the patient was able to follow his vocation as waiter at a London hotel. The hand was regaining strength gradually, but the muscles of the little finger were still weak; the movements of the shoulder were satisfactory. The method of performing the operation was briefly touched upon, and short accounts of similar operations were related. Reflecting on the disastrous consequences that might follow the forcible manipulation of ancient dislocations of the shoulder, excision of the head of the humerus was brought forward as a preferable method of treatment for cases like the present, when pain was marked, the displaced bone fixed, and symptoms of nerve pressure evident.—Mr. HULKE was glad to see this operation for affording relief in such cases again brought forward. It had been advocated and practised by von Langenbeck a great many years ago; it was also recommended in König's text-book and in Hueter's "Grundriss," and had been taught and practised by himself.—Mr. W. ADAMS said that owing to increased care in diagnosis cases of this kind were fortunately rare. He related the case of a lamplighter who fell from his ladder and dislocated the shoulder, which was not diagnosed. Two years afterwards he came under treatment for "wasting of the deltoid"; the head of the bone was found resting on the

dorsum of the scapula, and it was removed below the anatomical neck. A year afterwards the man was able to do any work short of lifting heavy weights. In the Transactions of the Society for 1885 he gave the history of a case in which he excised the head of the femur for an unreduced dislocation, the bone having become displaced during an attack of fever.—Mr. HOWARD MARSH was surprised to find that such an admirable result would follow division of the bone through the anatomical neck. He related the case of a man who had an old injury to the shoulder joint, which was fixed and painful. For treatment the adhesions were broken down under an anæsthetic; this failing, a dissection was done with a view to separate the brachial plexus from the adhesions. It was followed by no improvement, so, finally, the head of the bone was excised; but notwithstanding this, the man remained unrelieved. Of course, such a measure as excision of the bone should not be tried till other means had failed.—Mr. TIMOTHY HOLMES said that, as a rule, there were no urgent symptoms after unreduced dislocation. Pain was present at first, which usually subsided and left a comparatively useful limb; but in cases of great torture from pressure of the head of the bone on the nerves, rendering the arm useless, Mr. Sheild's operation was advisable. He had always looked upon subcutaneous section and deliberate fracture as far more dangerous than excision, and less likely to afford relief. The condition of the limb after excision was quite as good as with ankylosis in the normal position, and was much more useful than if the bone were allowed to remain in its abnormal position unreduced. He alluded to a case he recently brought before the Clinical Society in which an attempt at reduction produced injury to the axillary vessels.—Mr. R. W. PARKER inquired whether Mr. Sheild tried reduction after exposing the head of the bone.—Mr. H. W. PAGE said the operation had been undertaken because of the involvement of the nerves, and not for the abnormal position of the bone. Many cases were on record which showed that the nerves would recover if the pressure were relieved.—Mr. SHEILD, in reply, said that a case was recorded by Sir William Mac Cormac in the eighth volume of the St. Thomas's Hospital Reports, in which the bone was sawn through the surgical neck, but the ultimate result was not given. He divided the bone at the anatomical neck, as the operation was done to relieve pressure with the least possible disturbance of the soft parts. He emphasised the importance of placing a pad in the axilla, of rounding off the top of the bone, and of assiduously employing passive motion.

Dr. HALE WHITE contributed a paper on the Naked-eye and Microscopical Variations of the Human Thyroid Body. This organ had not been sufficiently examined for it to be known how variable it might be in patients dying of diseases which, as far as we know, were unconnected with the gland. This paper was based on the examination of forty thyroids taken at random from patients dying in Guy's Hospital. The size of the organ was very variable. It was as a rule, smaller in adults over fifty than in those under that age. Its shape was very inconstant. Save in myxœdema, the size and shape were unconnected with the fatal disease. The same was true of the size of the vesicles, the average of which was one twenty-fifth of an inch in diameter. The more distended the vesicle the flatter its epithelium, and the less the connective tissue between the vesicles. Parenchymatous cells, leucocytes, and red blood-corpuscles could all immigrate into the vesicles, and there, together with possibly the help of the epithelial cells, form the granular débris so frequently seen. Often all the vesicles in the whole of one section might be thus transformed. The indentations on the edge of the colloid matter and holes in its substance were due certainly to its invasion by parenchymatous cells, and perhaps other cells had a share in its production. Sometimes the colloid matter had a double contour, and sometimes it contained oxalate of lime and cholesterine crystals. None of these changes could be associated with any particular disease. The amount of connective tissue was variable. One case of myxœdema in in which the organ was completely atrophied, being nothing more than a little fibrous tissue, was described, as was another case presenting the same degree of atrophy in a patient dying of aortic aneurysm. It thus appeared that atrophy of the thyroid did not invariably produce myxœdema. The origin of vesicles from parenchymatous cells was considered. Lastly, the lymphatics were described.—Dr. CHEADLE thought it curious that there could exist complete atrophy of the thyroid without myxœdema. He inquired if in those cases where there was pressure in the recurrent laryngeal there was also pressure on the vessels.—Mr. J. BERRY had examined eighty-three thyroids with a view to discover any change in their condition in association with various circumstances. The state of the gland varied much in different individuals. In emaciated people it was large, yellow, and filled with secretion; in fat persons it was small and red, and in those who were extremely obese it approached the condition found in myxœdema. He referred to one case in which the thyroid was completely extirpated, and no symptoms of myxœdema were apparent five years afterwards.—Dr. HALE WHITE, in reply, said there was no pressure on the vessels in the case referred to.

CLINICAL SOCIETY OF LONDON.

Internal Derangements of Knee Joint.—Dislocations of Index Finger and Thumb.—Adenoma of Pinna.—Dry Mouth.

AN ordinary meeting of this Society was held on March 9th, Mr. Howard Marsh, F.R.C.S., Vice-President, in the chair.

Mr. CROFT contributed a paper on the Operative Treatment of Dislocated Semilunar Cartilage of the Knee Joint. He described the case of a labouring man, aged thirty-nine, who was admitted into St. Thomas's Hospital in April, 1887, for well-marked symptoms of dislocation of the internal semilunar cartilage in the right knee joint. The joint had been attacked by rheumatic inflammation eight years previously, but had not been permanently lamed by it. The accident which had caused the injury to the cartilage and consequent lameness had occurred three weeks before the date of the patient's admission to the hospital. As the man was quite incapacitated from following his employment, and suffered frequently from the displacement of the cartilage, Mr. Croft advised him to submit to a radical operation. In the belief that the anterior extremity of the cartilage had become detached, Mr. Annandale's operation was decided on. The joint was opened on May 5th, 1887, and the cartilage was found to have preserved its anterior and posterior attachments, but to have been torn loose from the intermediate connexions. It was lying in the inter-condyloid space, and a tongue-shaped piece, about three-eighths of an inch in length, projected from its upper surface. This had been partly torn up from the upper surface of the cartilage, and was a worse condition than had been expected. The anterior and posterior insertions were cut through, and the cartilage drawn out of the joint, which was then carefully closed, drainage being provided for. The operation was done antiseptically. On the fortieth day after the operation the man was discharged cured. He was seen four months later, and then had been in full work for some time. He attended for inspection by the members of the Society. Mr. Croft referred to the few positive data in English works concerning the subject, and drew the following deductions: (*a*) That the cartilages might be dislocated from their anterior attachments only, from their circumferential attachments only, and from both these insertions; and that rupture of the posterior insertion must be very rare, if it ever occurred. (*b*) That when the circumferential relations were ruptured the cartilage tended to displace into the intercondyloid notch. (*c*) That in such cases as Mr. Annandale's a good result might be obtained by re-fastening the loosened anterior portion of the cartilage to the tibia, and that in such cases as Mr. Brodhurst's and his own the whole cartilage might be safely excised. (*d*) A working man might preserve a strong, useful movable knee joint, though the whole internal cartilage had been excised. (*e*) Obstinate cases of this dislocation, attended by numerous attacks of pain and disability, might be safely subjected to "inspection," and, if need be, to operative treatment for radical cure.—Professor ANNANDALE said that up to the present time he had operated in five cases, and in four of these the internal cartilage was the one displaced. All were attended with a satisfactory result. He had met with three different conditions of internal displacement: (*a*) the anterior extremity of the cartilage was separated and turned backwards and inwards; (*b*) the cartilage was folded on itself like a handkerchief, and turned inwards; (*c*) the internal margin was loosened and turned over into the intercondyloid notch, so as to produce locking of the joint. In the case in which the external cartilage was loosened it was found displaced

backwards. The operation itself was devised simply to expose the cartilage. He made an incision along the upper margin of the head of the tibia, somewhat lower than appeared to be necessary, to allow for flexion of the joint. He then opened the capsular ligament, drew the cartilage into position with a blunt hook, and introduced stitches through the cartilage and the periosteum covering the head of the tibia. He used no drainage, kept the joint at perfect rest for six weeks, and allowed no active movement till after the eighth week.—Mr. DAVIES-COLLEY mentioned a case in which he had operated five months ago upon a young man, aged twenty-one, who had injured his knee by a fall from his horse. He recovered with a weak knee, but some six months later he was playing lawn tennis, and on turning sharply he dislocated his knee outwards, and the joint was fixed. The dislocation was reduced, but recurred rather frequently, and was accompanied with intense pain. He was fitted with knee-caps, but these not only did not prevent dislocation but hindered reduction. He then operated according to Professor Annandale's method, and found the inner third of the internal cartilage divided into three slips attached by their anterior and posterior ends. Two of the strips had separated, and on movement of the joint became displaced, causing locking. He stitched the strips together and then fastened them to the inner tuberosity. There was a good deal of constitutional disturbance after the operation, but the patient made a good recovery, and could now walk four or five miles with a stiff joint. He proposed to keep the joint fixed for at least six or eight months. He suspected that the injury to the cartilages was inflicted at the first accident, then some repair took place, but at the subsequent strain the strips got detached and displaced.—Mr. H. ALLINGHAM referred to a case which he showed at the Society six weeks ago, in which he had sutured the internal semilunar cartilage to the head of the tibia. He used no drainage, and the man was now quite well.—Mr. HOWARD MARSH mentioned a paper by Professor Kocher of Berlin, who had described a fungous disease of the semilunar cartilages, in which there was chronic inflammation with alteration of texture. He had removed the cartilages in three cases with excellent results. He showed several kinds of apparatus for fixing and limiting the movement of the knee joint.—Mr. HENRY MORRIS classified these dislocations into mesial and marginal. The latter might occur either by the cartilage being pulled out of place by a sharp instrument, or when the leg was partially dislocated outwards with rupture of the internal lateral ligament. He described a case in which the internal cartilage was displaced outwards.—Mr. CROFT, in reply, desired to put the case on record because it was the result of actual inspection of the joint, and such positive data were needed in order to compile a correct classification of these injuries.

Mr. CHARTERS SYMONDS read notes of two cases of Dislocation of the Index Finger, reduced by opening the joint and dividing the retaining band, after failure of the usual methods. Both were boys aged nine. In one the accident was caused by a blow from a cricket ball; in the other by a fall on to the finger. The first phalanx was displaced backwards, its base projecting above the level of the metacarpal bone to a slight extent. The finger could be brought straight, so that the displacement of the phalanx was not severe. The most noticeable feature was a prominence in the palm caused by the head of the metacarpal bone. The skin was tightly stretched over it, and almost perforated. There was also a deep sulcus running round one side of this prominence. Every method was used to effect reduction, including division of the fibrous structures in front and round the back of the metacarpal bone. Finally, by a vertical incision the joint was opened on its outer side, and while the base of the phalanx was fully exposed the head of the metacarpal bone was found concealed by a fibrous structure, through which it had passed buttonhole-like. The moment this was divided the head was released and the dislocation reduced. A small fissure was observed in each case in the cartilage. This extended into the bone and was evidently the result of injury, but did not contribute to the difficulty of reduction. Primary union with useful joints occurred in both cases. In the second case an attempt was made to divide the retaining structures subcutaneously by the light of the first case. That this failed Mr. Symonds thought was due to the fact that the incision was badly planned. He suggested that in future cases a tenotomy knife should be passed into the joint and an incision made on to the head of the metacarpal bone from before backwards. This, if carried well forward, would have divided the fibrous ring that retained the head of the bone. The fibrous band was considered to represent the anterior ligament.

Mr. G. R. TURNER read a case of Dislocation of the Metacarpo-phalangeal Joint of the Thumb Backwards, in which excision of the head of the metacarpal bone was practised. The injury was eleven days old when first seen, and all attempts at reduction by manipulation and extension having proved unavailing, an incision was made and the lateral aponeuroses of the flexor brevis divided. The main obstacle to reduction, however, was found to be the tendon of the long flexor, which had slipped inwards. After forcible traction had been made, this reduction was effected, but the dislocation was so easily reproduced, and the parts were so tense and swollen, that it was thought best to remove the head of the metacarpal bone. The wound healed kindly, and the man recovered with a perfectly movable joint. He was shown to the Society some weeks ago, and, except for a very little shortening, the injured was as good as the sound thumb. The point of interest in the case was the obstacle to reduction offered by the long flexor tendon. Excision of the head of the metacarpal bone in irreducible cases of this dislocation was advocated.—Mr. CROFT mentioned a case in which efforts were made to reduce just such a dislocation without success. He had then made an incision in the line advised by Mr. Symonds, just above the level of the internal lateral ligament. He found a band, which he supposed to be part of the capsule, stretching across the head of the metacarpal bone, on cutting which he had no difficulty in effecting reduction.—Mr. DAVIES COLLEY asked Mr. Symonds what kind of structure it was that rendered operative treatment necessary. In a case of his own he had found a band or apron at the back of the metacarpal bone, which held it back. It looked like the glenoid ligament, which had been ruptured close to its attachment to the metacarpal bone. He asked whether the structure he divided was supposed by him to be the glenoid ligament.—Mr. SYMONDS said the word "apron" expressed what he found better than a band. He took it to be the anterior ligament,

Mr. BLAND SUTTON gave the history of a case of Adenoma of the Pinna. The patient, a man aged sixty-four, detected three years ago a small tumour behind the left pinna. It was situated over the mastoid process, and was about the size of a nut. It slowly increased in size. He was advised at this time by an eminent London surgeon never to allow anyone to interfere with it. The tumour, continuing to increase in size, involved the pinna, extended down the auditory meatus, made its way into the cavity of the tympanum, produced deafness, and incapacitated the patient from playing upon the violin. He was a skilful violinist, and in his leisure hours taught this accomplishment. In December, 1886, the patient presented the following condition when Mr. Sutton saw him in consultation with Dr. Hollings. A tumour of the size of a big orange was found wedged in between the mastoid process and the lower jaw; the pinna projected from the midst of this mass. The auditory meatus was quite blocked by the tumour, and its surface had ulcerated in two or three spots. Mr. Sutton took counsel with his friend Mr. Henry Morris. After due consideration, a full explanation of the risks was submitted to the patient, and he was allowed to decide for himself. The patient was most anxious for the operation, and in January, 1887, the tumour was removed. It occupied the tympanum, and by its pressure had opened up the mastoid cells; indeed, the anatomy of the middle ear was clearly visible. The patient recovered rapidly, and in five weeks was again occupied in his office. Three days after the operation he could again distinguish musical notes, and in a few days more the hearing rapidly returned. In a month from the day of the operation he commenced anew his studies on the violin, and for the next twelve months enjoyed his favourite instrument. Things went on well until February of the present year, when he again felt unwell, and on examining the scar it was clear that there was some return of the tumour. At this time he showed signs of aphasia, which gradually increased until he could not remember any noun, common or proper, not even his own name. There was neither optic neuritis nor epilepsy. As the loss of the memory of words was the only prominent symptom, it was decided to trephine the skull in the situation of the pterion and ascertain the limits of the intra-cranial growth, and, if possible, again remove the tumour. This was done on Feb. 26th. The

tumour was far too large and infiltrating to allow of its removal. Three days later the patient died. At the post-mortem a tumour of the size of a small orange was found in the left middle fossa of the skull; a portion of it had burrowed backwards and projected into the lateral sinus. The tumour had extensively invaded the temporo-sphenoidal lobe, but Broca's convolution had remained unaffected. The primary tumour was found to be an adenoma, but the nature of the intra-cranial portion could not be determined in time for the meeting.—Mr. HOWARD MARSH hoped the structure of the intra-cranial growth would be recorded.

Dr. W. B. HADDEN read a paper on Dry Mouth, or suppression of the Salivary and Buccal Secretions. The patient was a woman aged sixty-five, who had suffered from no affection which could throw light on her present condition. There was no history of family paralysis, or of the prolonged use of belladonna. Her mouth began to get dry some months previous to observation. The tongue was red, devoid of epithelium, cracked in all directions like crocodile skin, and absolutely dry. The mouth generally was dry, and the mucous membrane smooth, shiny, and pale, with a few patches of injection. There was also deficiency of moisture at the back of the pharynx. The tonsils were natural. The salivary glands, as far as could be made out, were natural in size. Common sensation of the inside of the mouth was unimpaired; but the sense of taste was retarded in consequence of the deficiency of moisture. When the mouth became moister later on, the saliva was found to be slightly acid, and to exert no action on a solution of starch. During the time the mouth had been getting dry, perspiration had notably diminished, and the lachrymal secretion was arrested. The patient received much benefit from the use of jaborandi. A case of similar nature under the care of Mr. Hutchinson was alluded to, and one under Dr. Rowlands of Liverpool, was communicated by the author of the paper. In conclusion, it was suggested that this condition of dry mouth was due to some disorder of the nervous apparatus.—Dr. GOLDING BIRD observed that the secretion was stated to have been acid, and he asked whether the acidity had been neutralised before testing its action in starch, also whether the starch had been boiled. He asked further whether the want of saliva had any noticeable effect on gastric digestion.—Dr. HADDEN, in reply, said that digestion had not been impaired. With regard to the acidity, an alkali had been added in testing in the later observations, and boiled starch was used.

MEDICAL SOCIETY OF LONDON.

Lumbar Colotomy.—Psoriasis.

AN ordinary meeting of this Society was held on March 12th, Sir William Mac Cormac, President, in the chair.

Dr. JULIUS ALTHAUS proposed, and Mr. R. W. PARKER seconded, a vote of thanks to Dr. J. Hughlings Jackson, the retiring President.

Mr. WALSHAM proposed, and Mr. STEPHEN PAGET seconded, a vote of thanks to Dr. Samuel West, the retiring secretary, and to the retiring members of the Council.

Sir WM. MAC CORMAC, on taking the chair for the first time, thanked the Fellows for electing him President, and expressed his determination to do all in his power to promote the prosperity of the Society.

The Fothergillian Gold Medal for an essay on the Pathology, Clinical History, and Diagnosis of the Affections of the Mediastinum, other than those of the Heart and Aorta, has been awarded to Dr. Hobart Amory Hare, of Philadelphia.

Mr. HERBERT ALLINGHAM read a paper on the Causes of Failure to find the Colon in Lumbar Colotomy and the manner of obviating them. After some prefatory remarks on the frequency of failure in performing this operation, Mr. Allingham proceeded to discuss the anatomical structure of the large intestine. He said that the discovery of longitudinal muscular bands was the only sure sign of importance that the large and not the small intestine had been reached; these bands were detected more easily when covered by peritoneum, and therefore to ensure the discovery of them, and the consequent reaching of the large intestine, the peritoneum should generally be opened. From the experience of himself and his father, he concluded that the best incision was one with its centre between the anterior and posterior superior spines of the ilium and midway between the last rib and the iliac crest; it should be between two and three inches in length. He then discussed the various positions which the right and left colon might occupy with regard to their peritoneal covering. These fell under three heads: 1. When the peritoneum left the posterior part of the gut uncovered; according to his statistics this only occurred in 18·3 per cent. of cases on the right side, and in 16·6 per cent. on the left; in this case if no longitudinal bands could be seen, the peritoneum should be intentionally opened. 2. When the colon was entirely surrounded by peritoneum, and possessed rather a short mesentery. Here the longitudinal bands could be neither seen nor reached without opening the peritoneal cavity, and, according to him, this occurred in 81·6 per cent. of cases on the right side, and in 83·3 per cent. on the left. 3. When the mesentery was much longer, so that the large intestine was liable to slip to the side of the abdomen opposite to that in which the incision was made. This condition had heretofore been the *crux* of operators. In both the latter cases it was indispensable to ascertain that the gut had longitudinal bands before opening it, and in both it was necessary to introduce the finger or the hand; the methods of so doing were demonstrated by diagrams.—Mr. C. B. LOCKWOOD said that arrest of development, or adhesions formed during intra-uterine life, might prevent the right colon reaching its normal position. If the colon could not be found, he advocated fastening the small intestine in the wound, and then waiting for forty-eight hours before it was opened. He thought inguinal colotomy a preferable operation.—Mr. TREVES thought too much stress had been laid on the finding of longitudinal bands. With regard to the meso-colon, he had found that, of 100 bodies, in 52 a meso-colon was absent on both sides, in 14 it was present on both sides, in 12 it existed on the right side alone, and in 22 on the left side alone. He deprecated opening the abdomen as a matter of routine; in many cases the gut was distended and rotten, and the hand could not with safety be passed in.—Mr. HARRISON CRIPPS thought a distinction should be drawn between a distended and an empty bowel. He advocated careful suturing off of the peritoneum before the bowel was opened, and the latter should be punctured first by a trocar and cannula. Distending the colon with air would often aid in finding it.—Mr. H. ALLINGHAM thought it as safe to open the peritoneum in the loin as anteriorly. He was convinced of the superiority of the inguinal method.

Mr. MALCOLM MORRIS read a paper entitled, "Is Common Psoriasis a Constitutional or a Local Disease?" This affection was first described under the name of lepra, and was so known by Willan and Sir Erasmus Wilson. He showed to the Society a typical case of the affection. Almost all authors stated that the causes of the disease were shrouded in obscurity. Had it anything in common with the well-known constitutional diseases, such as the eruptive fevers, syphilis, or tuberculosis? In psoriasis there was no rise of temperature and no malaise; it only occurred in individuals in really good health, and it only attacked one organ of the body—i.e., the skin, for the affection known as psoriasis of the tongue bore no relation to it. Syphilis, on the other hand, was a general constitutional disease, and attacked the skin, glands, and mucous membranes. Sir Erasmus Wilson had stated that patients with psoriasis appeared in good health; yet there must be some unperceived weakness of constitution. He himself, in investigating these cases, had only been able to find constitutional disease in 5 per cent. of his cases. Dr. Liveing had described two varieties of psoriasis—of the young and of the gouty; and he stated that, though anatomically they were alike, yet they differed in their general features, and it was necessary to distinguish between them for purposes of treatment. Dr. Liveing further said that a person might suffer from gouty psoriasis, even though he had never been the subject of articular gout. Sir Alfred Garrod, in 1881, said he had come to the conclusion that psoriasis was not connected with gout in the same way that eczema was. When a patient suffering from psoriasis developed articular gout, it had been noted that the psoriasis disappeared from the skin. His explanation of this fact was as follows. A certain standard of health was necessary for the existence of psoriasis; and many illnesses—such as the specific fevers, menorrhagia, pneumonia, and even pregnancy—would, by lowering this standard, cause the cutaneous affection to disappear for a time. Passing to the action of remedies, he pointed out that all the drugs used to cure psoriasis by internal administration also tended to lower the system.

The continued use of purgatives and anti-gout remedies did this; and it had been shown that arsenic, while in anæmia it increased the number of red corpuscles, in health it diminished them. He thought it resembled ringworm closely, and a parasite had been found for it, which existed deep down in the papillary layer of the skin, though its symmetrical distribution was unlike the work of a parasite. In favour of its blood origin were the facts of its symmetry and heredity; in favour of its local origin, the action of remedies, soap alone being able to cure it if well rubbed in. His conclusions were as follows: (1) that psoriasis commenced in the epidermis, and that it was not a blood disease; (2) that its cause was at present unknown; (3) that it was a local and not a constitutional affection; (4) that it could be more effectually cured by local than by internal measures.

OPHTHALMOLOGICAL SOCIETY.

Retinal Hæmorrhage in Yellow Spot Region.—Ciliary Tumours.—Sarcoma after Sclerotomy for Glaucoma.—Punctured Wound of Upper Eyelid, followed by Palsy of Third Nerve and Optic Nerve Atrophy.

AN ordinary meeting of this Society was held on March 8th, Mr. J. W. Hulke, F.R.S., President, in the chair.

Mr. LANG read the notes of a case of a large Retinal Hæmorrhage in the Yellow Spot Region, which became absorbed, leaving perfect vision. He remarked that in those cases where the vision was restored it was most probable that the hæmorrhage took place between the hyaloid membrane of the vitreous and the retina, and not, as hitherto believed, between the layers of the retina or in the choroid. In support of this contention he drew attention to the red colour that the lights presented to the damaged eye, and also to a folded appearance of a membrane seen in front of the extravasation, and which could only be the displaced hyaloid raised by the hæmorrhage. He also explained the circular appearance of these hæmorrhages by an anatomical condition noticed by Mr. Marcus Gunn—namely, that at the macula the hyaloid was probably not attached to the retina at all, or at any rate not so firmly as it was around the yellow spot region, therefore a hæmorrhage would be likely to be limited in the circular manner so frequently seen.—The PRESIDENT said that the hæmorrhage did not probably come from the same set of vessels in all the recorded cases.—Mr. SILCOCK referred to a case published by De Wecker, accompanied by a drawing of a choroidal hæmorrhage. A patient under his own care had a very small central scotoma, but objects did not appear to be red to him. As the hæmorrhages were large and at a point opposite to no large retinal vessel, he inferred that they were choroidal, and, moreover, they usually cleared up entirely.—Mr. NETTLESHIP exhibited drawings of two cases of large semicircular hæmorrhage at the yellow spot; in each of them the inferior macular artery, which traversed the blood patch, was found to be quite obliterated in one case, and much altered in the other. They showed that the vessel which supplied the blood effusion belonged to the retina. In the early stage of some cases the blood was found extending on to the surface of the optic disc; in others it ruptured into the vitreous some days after the extravasation at the fundus. This could with difficulty be explained if the blood came from the choroid, but it could be easily understood on the hypothesis of Mr. Gunn and Mr. Lang.—Dr. ANDERSON referred to a case where at the necropsy it appeared that the hæmorrhage must have occurred between the retina and vitreous.—Mr. LANG pointed out that it was only in cases of complete recovery that the hæmorrhage took place in front of the retina.

Dr. MULES read a communication on Ciliary Tumours. He desired to draw a line at primary ciliary origin, and traversed Knapp's view of their frequency. Detailing the variety of these growths after their division into two great classes of benign and malignant, he referred to their diagnosis as between ciliary tumours and those confined to the iris, and laid stress on an early and accurate diagnosis, to be followed in the case of iritic tumours by the immediate removal of the affected portion of tissue. He pointed to the value of a light beam in cases where the diagnosis was doubtful between early ciliary staphyloma and ciliary tumour, and deprecated the differential diagnosis between intra-ocular tumours and harmless retinal separation by acupuncture, adducing examples of its danger. He further referred to the locality of these growths, and corrected his previous statement that they always arose at the inner quadrant. The mode of development was touched on. The "iridodialysis" was explained as taking place in three different ways, each interesting, and suggestive of general infection. By the kindness of members, drawings and sections were shown illustrating the paper. Some fine slides of ciliary and other ocular tumours were contributed by Professor Hirschberg, and the author from his own collection brought forward specimens and drawings of these rare affections.—Mr. LAWFORD remarked, in reply to the President, that he had recently examined a ciliary tumour, which proved to be a mixed round- and spindle-celled sarcoma. It grew from the inner quadrant.—Mr. SIMEON SNELL said that he had operated on two cases of sarcoma of the ciliary body in old people.—Mr. MCHARDY had found that where the retina was detached, with diminished tension and intra-ocular growth, the tumour would be found to have arisen in the ciliary body. He considered this a point of considerable diagnostic importance.—Dr. MULES said he intended to present the series of drawings used in illustration of his paper to the library of the Society.

Mr. SIMEON SNELL (Sheffield) related a case of Sarcoma after Sclerotomy for Glaucoma. The patient was a man aged forty-two, and sclerotomy was performed on March 27th, 1884, for subacute glaucoma. Great pain, + T 2, media turbid, cornea steamy-looking, but vision was $\frac{2}{36}$; relief to pain was immediate, vision improved to $\frac{2}{9}$, and tension became normal. He remained well up to the latter end of 1885. The media were clear, and a good view of the interior was obtainable; beyond excurvation of the optic disc there was nothing to note. In January, 1886, he came with two small "lumps," one on the site of the puncture, and the other at the counter-puncture for sclerotomy. The sclerotomy had been performed with De Wecker's knife, and thus the wound was limited to the puncture and counter-puncture, and to the width of the instrument. The pain was relieved and the staphylomas subsided with eserine. He returned to work, but he said that during the whole of the year pain was never really absent. In September, 1886, he came with severe pain, and again eserine did some good. At the end of December, 1886, he was again seen, and then in addition to the staphylomas, at the punctures for sclerotomy, was another above and between them; tension was decidedly *plus*. The lens was more opaque, and a view of the interior was not possible. He still saw large letters by turning the eye outwards. Pain was very severe. Puncture of the sclerotic was performed on Dec. 30th, with temporary relief, and repeated on Jan. 22nd, 1887. The growths were much enlarged, and were growing. On Feb. 16th the globe was enucleated. Besides the outgrowths in front, which reached behind, there were large nodules on the sclerotic behind. The optic nerve was divided back as far as possible, and suspicious pieces of tissue removed. The growth returned, and on July 10th the orbit was cleared out and chloride of zinc paste applied. No recurrence. The tumour was a small spindle-celled sarcoma. It filled the eyeball, except a little space below and to the inner side; it had perforated the sclerotic above, midway between the optic nerve and the cornea, and also at the outer side of the optic nerve entrance. Sections of the eyeball, mounted in glycerine jelly, were shown.—Mr. LAWFORD inquired whether there had been any signs of glaucoma in the opposite eye.—The PRESIDENT said that nothing was more difficult than to assign cause and effect in these cases, and it must be remembered that a sarcoma would sometimes lay dormant for a long time.—Dr. MULES considered that in such a case a small beam of light would have been of great aid in the diagnosis.—Mr. HENRY POWER alluded to the danger of a too free use of choride of zinc; in one case, after clearing out the contents of the orbit he applied it; the patient suffered much pain and died in two days, the caustic having eaten into the artery.—Mr. NETTLESHIP had likewise seen harm follow the use of chloride of zinc as a styptic, and in one case the fatal result was to be attributed to its action.

Mr. SIMEON SNELL read for Mr. W. A. Garrard the history of a Punctured Wound of the Upper Eyelid, followed by complete Palsy of the Third Nerve and Optic Nerve Atrophy. The case was that of a boy, aged seven, who, on April 19th, 1887, fell while holding a piece of stick, and it pierced the left upper eyelid just above the margin. A boy pulled it out, but there was no reason to think it had pierced deeply. He was admitted into the Rotherham Hospital. The next day the eye was closed; on the fourth the eyelid was still drooping,

and, on raising it, dilatation of pupil, loss of movements of eyeball, and the characteristics of complete palsy of motor oculi were discovered. The optic disc was normal. On May 9th Mr. Snell saw the patient; the optic disc was a little paler than its fellow; complete paralysis of the third nerve was present; accommodation was paralysed. A few days later recovery commenced by his being able to raise the eyelid a little, and by June 2nd ptosis disappeared, and the movements of the eyeball were good. When seen in November all affections of motor oculi had disappeared; the optic papilla was atrophic; the vessels were not reduced in size; vision was very imperfect. At no time were the fourth, or sixth, or ophthalmic division of the fifth involved. In discussing the nature of the lesion in this case, Mr. Snell said that direct injury to the parts at the back of the orbit was excluded, as the stick did not penetrate. Leber had accounted for cases of monocular amaurosis after blows about the supra-orbital region or head, as due to fracture in the vicinity of the optic foramen, and not to interference with the fifth nerve. Holder had pointed out also that in fracture of the base, in 60 per cent. at post-mortem examination, fracture of the wall of the optic foramen occurred. Berlin had stated that Nuhn, in 1845, sought an explanation in an injury or rent of the optic nerve within the optic foramen. It seemed doubtful if the blow on the eye in the case related was sufficient to cause fracture, as Leber suggested; but it might have been enough to have driven the eyeball into the orbit, and causing jarring or compression of the optic nerve. The question why the third was the only nerve affected was not easy of explanation. The slow onset of the optic nerve atrophy seemed to indicate that the lesion was high up, and the degenerative process passing downwards. The almost immediate presence of the third-nerve palsy suggested effusion, which would allow of the recovery; the completeness of the palsy pointed to the lesion being close up to, or at the trunk of, motor oculi.—Mr. NETTLESHIP thought that most probably there had been a penetrating wound of the orbit, and he related a very similar instance where a penetrating wound had remained undetected. He knew of no reason why one nerve should recover and not another, but the optic nerve very rarely recovered.—Mr. EDGAR BROWNE agreed with Mr. Nettleship as to the lesion present, and quoted a case in which a portion of the stem of a pipe lodged in the orbit and produced ecchymosis.—Mr. ADAMS FROST related an almost parallel instance.—The PRESIDENT referred to a patient who died of tetanus, caused by the presence of a foreign body in the orbit.—Dr. VAN MILLINGEN had seen ptosis independent of other paralysis result from an orbital contusion.—Mr. SNELL, in reply, said the patient had been examined immediately after the accident by a very competent observer, and he himself had been unable to find any wound of the conjunctiva; he adhered, therefore, to his belief that there had been no penetrating wound, and, even had there been, he failed to see how that would explain the total paralysis of the third nerve present in this case.

The following card specimens were exhibited:—

Mr. J. W. HULKE: Case of Pulsating Tumour of the Orbit, with Proptosis.

Dr. VAN MILLINGEN: Instruments.

Mr. E. T. COLLINS: Disease of Choroid (? Colloid).

Mr. BICKERTON: Piece of Glass removed from the Anterior Chamber.

Messrs. CRITCHETT and JULER: Case simulating Glaucoma.

Mr. DOYNE: A new form of Optometer.

EPIDEMIOLOGICAL SOCIETY OF LONDON.

Yellow Fever—Specific Febrile Diseases of Malarious Origin.

AT a meeting of this Society held at Chandos-street, Cavendish-square, on Wednesday, Feb. 8th (Dr. Thorne Thorne, President), papers were contributed by Dr. Donovan (Malta) on Yellow Fever, and by Inspector-General Donnet on some Specific Febrile Diseases of Malarious Origin, and on the Necessity of the Existence of Germs for their Production.

Dr. DONOVAN'S paper professed to be a *résumé* of Professor Freire's work on the Microbian Doctrine of Yellow Fever and its Preventive Inoculation. In this remarkable work, thus brought before the scientific world in this country, the isolation and growth of a particulate germ, called by the discoverer the "cryptococcus xanthogenicus" are described at some length. The mode of its attenuation is also fully given, as well as an account of its inoculation into human beings at Rio Janeiro, with a view to prevention of yellow fever. Some statistics are given on this latter point, and are quoted by Dr. Donovan from the Professor's book. A detailed account is also forthcoming of the examination of the earth of cemeteries containing yellow-fever corpses, and the discovery of the same microbe as was found in the fluids and tissues of yellow-fever patients. Cremation of the dead is strongly advocated.

The other paper, by Inspector-General DONNET, treated of the specific nature of the various malarious diseases, and contained a full description of the etiology, behaviour, and geographical distribution of yellow fever. He speaks of malarious diseases choosing the deltas of large rivers as their especial habitat. Thus, the plague generates in the delta of the Nile, cholera in the Sunderbunds of the Ganges, and yellow fever in the deltas of the Mississippi and the Orinoco. Yellow fever was not known in Europe before the discovery of America by Christopher Columbus, no well-authenticated instance of its invasion having occurred prior to the Lisbon epidemic in 1723, which was imported there from the marshy shores of the American continent. The zone of yellow fever commences at Georgetown in South Carolina, sweeps round the southern shores of North America and the eastern shores of Mexico and Central America, and terminates at Georgetown, in Demerara, being contained between latitudes 33° and 6° north. The factors necessary for the development of yellow fever are (1) importation, (2) a temperature above 70° F., (3) a suitable soil, and (4) an appropriate pabulum. Cold has a remarkable power of arresting it; ships from the West Indies are ordered to Halifax for this reason. Dr. Donnet refers in his paper to the preference of yellow fever for white races and for fresh arrivals, and also its greater proneness to attack the young and vigorous. This latter peculiarity is so marked that physicians in former days used to recommend people visiting the tropics to adopt such a regimen as would ensure a lowered vitality of their system. A useful table, embodying the characteristic distinctions between yellow and remittent fever, is appended to the paper.

In the discussion which ensued, the President, Inspector-General Lawson, Deputy Inspector-General Lloyd, Dr. Willoughby, Surgeon-Major Pringle, and Surgeon-General Manifold took part.

SOCIETY OF MEDICAL OFFICERS OF HEALTH.

Port Sanitary Administration on the Tyne.

AT a meeting of this Society on Feb. 17th a paper was contributed by Mr. HENRY E. ARMSTRONG, medical officer of health for Newcastle-on-Tyne and the River Tyne Port, entitled "Port Sanitary Administration on the Tyne—a Seven-years' Retrospect." One object of the paper was to discuss from a local standpoint the principal features of port sanitary work in general, and to show how such work may and should be progressive. After indicating the points of difference between sanitary work on board ship and on shore, and reviewing the law relating to port sanitation, the speaker gave an outline of the history of the River Tyne Port Sanitary Authority, which is now permanently constituted under an order of the Local Government Board, and consists of a joint board of representatives from Newcastle, Gateshead, Tynemouth, South Shields, Jarrow, and other local boards on each bank of the river below Newcastle. The district is about thirteen miles in length, and its shores are covered with works and industries of various kinds. The riparian population is about 5,000,000. During recent years great changes in the port have been made by the Tyne Commissioners, who have spent half a million on their various works—widening and deepening the river, making piers, docks, warehouses, and otherwise improving the navigation and developing the trade of the Tyne. One effect of these works is greatly to increase the volume of salt water in the river to a distance of several miles above Newcastle, to the sanitary advantage of the riparian population. The effect of these improvements on the commerce of the Tyne was proved by the returns submitted of shipping, ship-building, imports and exports, coal, &c., showing the large and increasing trade now done in the port. The sanitary administration of the

port comprises (1) the staff of the Health Department of the Sanitary Authority and the appliances provided for work, and (2) the work including the diseases dealt with and the amount of inspection done. The Health Department at present consists of a medical officer and assistant medical officer of health, an inspector, and two assistant inspectors of nuisances, the steward, matron, watchman, and servant of the floating hospital, and crew of the steam launch. Mr. Armstrong described the changes that had occurred and the development that had taken place in the department since its formation in 1871, and detailed the respective duties of the different officers. The hospital accommodation of the Port Sanitary Authority includes a pontoon hospital of thirty beds in three ward blocks, the original float of ten beds, which will be abandoned on the completion of the administrative block of the pontoon hospital, and a cholera hospital of ten beds built on the Dutch galliot *Alliance*. In several respects sanitary authorities in ports have more power over diseases than those on land, as was shown. The means of acquiring information as to infectious disease on shipboard, or which might be introduced into this country by means of ships (cholera, &c.), were described at length. The nature and extent of the diseases for which patients were admitted to hospital during each of the seven years under review, and the ports or countries from which such diseases were brought, were stated in tables. The effect of coasting vessels not reporting all cases of sickness to the Customs on entering the port was dwelt on. The cholera precautions adopted in the port were described in full. A series of tables set forth the numbers of vessels arriving in the Tyne from cholera infected or suspected ports, the respective months in which the largest numbers of these arrivals occurred, and the cholera-infected ports from which they came during each of the last three years. After this came an account of the general sanitary inspection carried on in the port, showing in tabular form the number and nationality of the vessels inspected each year, the comparative sanitary state, the character of the principal defects, accommodation provided, population of the vessels visited, with certain particulars respecting the emigrants calling at the port *en route* for America, the provisions and water supplied to ships, and special and perishable cargoes. A short statement as to the smoke nuisance, and the action taken in respect to it, followed by some observations on the relations existing between the Port Sanitary Authority and the Local Government Board, brought the paper to a close.

NOTTINGHAM MEDICO-CHIRURGICAL SOCIETY.

A MEETING of this Society was held on Dec. 16th, Dr. Ransom, F.R.S., President, in the chair.

Tapeworm.—Mr. WINDLEY read notes of a case of this disease. The patient, a lad of seventeen, was under treatment for seventeen weeks, during most of which he was in a high state of fever, the temperature several times rising above 105°, and occasionally over 106°. The diagnosis was doubtful, there being no confirmatory evidence of enteric, acute, tuberculosis, or other disease. On a dose of one drachm and a half of extract of male fern being given, a large tapeworm was expelled, and the temperature rapidly became normal. The convalescence was very speedy, and strength was very rapidly regained. — Dr. RANSOM, in a large experience of tapeworm, had seen no parallel, and thought that this case was one of some other disease—e.g., enteric—with which the tapeworm happened to be associated, and that the tapeworm was not the cause of the pyrexia.

Locomotor Ataxy.—Mr. PRYCE showed a case of this disease in a woman aged forty-five, who presented the usual characteristics of the disease. The most important symptom in the case was total blindness, the result of atrophy of the discs. Impaired vision was noticed six months after the commencement of the ataxic symptoms, and rapidly (within six months) developed into total blindness.

Dr. ELDER described a case of Double Ovariotomy complicated by secondary hæmorrhage and the opium habit.

Mr. KINGDON showed (1) a case of Enlarged Spleen in a man, and (2) two pathological specimens—(*a*) Syphilitic Cirrhosis of Liver, (*b*) Alcoholic Cirrhosis of Liver.

Dr. WHITELEGGE showed a chart of the fatal cases of Measles occurring in Nottingham for each quarter since 1870, and pointed out the regular recurrence of epidemic prevalence, each alternate winter, from 1878 onwards.

A meeting of the Society was held on Jan. 6th, Mr. Hatherly, Vice-President, in the chair.

Dr. MUTCH read notes on a case of Acute Peritonitis (tubercular) treated successfully by abdominal section, and Dr. ELDER described the operation which was performed.

Mr. BARBER showed a case of Ulnar Paralysis due to rupture of the ulnar nerve, following dislocation backwards of the elbow.

Perforating Ulcer of the Stomach.—Dr. ROTHERA read a paper on this subject. He commenced by treating somewhat fully the etiology of the disease, in which he endorsed Professor Virchow's theory—viz., that there must be some interruption to the circulation of the blood in the gastric wall, leading to necrosis, which is in turn attacked by the corroding or digestive action of the gastric juice. With regard to treatment, he laid stress on the importance of keeping the stomach at absolute rest by means of rectal feeding; and also strongly advocated abdominal section in case of perforation, this giving, in his opinion, more hope of success than the old method of opium and expectancy.

Dr. BROWN SIM showed a specimen of Congenital Tumour, which had been dissected by Dr. Handford. It was rounded, half as large again as a child's head, and attached to the lower outlet of the pelvis, the lower portion of the spinal cord, and the rami of the pubes and ischia. The growth was distinctly lobulated, of unequal consistence, and in places conveyed a distinct sense of fluctuation. Microscopically it closely resembled an ovarian systoma, contained muscle fibre (unstriped) and cartilage, but no bone or teeth. Dr. Handford considered the growth to be one of the Teratomata, and to have originated in a misdevelopment of a misplaced portion of the germinal area. It was closed allied to the dermoid cysts.

Mr. ANDERSON showed a large Polypus removed from the Naso-pharynx.

Reviews and Notices of Books.

Report of the Ninth International Medical Congress, held at Washington in September, 1887. London: Printed for Her Majesty's Stationery Office. 1888.

THIS is the official report by Deputy Surgeon-General Marston, C.B., who was sent by our Government as Army Medical Delegate to the Congress, in which he gives not merely a *précis* of the proceedings at the meetings, but also notes on various hospitals which he visited, and on other matters connected chiefly with military service. It contains much valuable and interesting information, in a very condensed form, regarding the water-supply for troops, the soldier's ration, huts, hut and field hospitals, the influence of age and acclimatisation, or seasoning, on troops, and the treatment of wounds on service and of some of the most prevalent diseases among soldiers in the field. He also gives a description of several hospitals in New York, Philadelphia, and Baltimore, and of the Soldiers' Home in Washington, an institution somewhat resembling Chelsea Hospital, but on a smaller scale. The summary of the regulations for the examination of recruits and the medical examination for pensions cannot fail to prove interesting to our military readers. As we gave a full report of the proceedings of the Congress, and the space requisite to notice all the subjects referred to in the paper now before us would far exceed the limits at our command, we shall content ourselves with calling attention to one or two subjects only, and recommending our readers to procure and study the book for themselves.

The first point we would notice is the value of opium in cases where, from over-fatigue, indifferent food, and irregular or insufficient sleep, the men show signs of depression, loss of appetite, and want of energy. In such cases, at least if the strain is likely to be only temporary, Dr. Marston has found small doses of opium to be most valuable. "The opium is a diet to them; it economises the fuel, and eases, as it were, the animal machine at a time when its energies have to be obtained from molecular dis-

integration—a destructive metabolism of its own tissues instead of that of the fuel put into it."

In a paper on Heat-stroke and allied diseases, by Dr. John Anderson, Brigade Surgeon, retired (published in our impression of October 29th last), after pointing out the prophylactic measures which should be adopted, and the active treatment requisite in the graver forms of heat-stroke, the author brought to notice the beneficial result obtained by the hypodermic use of quinine in such cases. On one occasion, at Mian Mir, he treated fourteen cases, all of them insensible from heat-stroke, by subcutaneous use of quinine, with a fatal result in one case only. "The dose I use for injection is from two to four grains, and this may be repeated at such intervals as may be indicated by the condition of the patient. I have administered a second dose in half an hour after the first, and a third in two, three, or four hours after the second." The quinine appears to control the temperature in a few minutes. Of course, other means of reducing the body heat, as ice and cold affusion, must also be adopted.

In the section of Materia Medica and Therapeutics Dr. Marston calls attention to the great importance, especially on field service, of reducing the number and bulk of the drugs employed, and shows how that could be effected by the introduction of the more active and compressed preparations in the form of tabloids and triturates. The only objection we see to the adoption of this system is the fear of adulteration on the part of the manufacturers. His suggestions for the modification of the medical and surgical equipment for the field well deserve the careful consideration of the authorities. One very important advantage would be a reduction of the amount of transport required, the difficulty of procuring which has always been severely felt by the department.

In recruiting for the United States army, able-bodied men of good character, between the ages of eighteen and thirty-five, are taken. For the infantry and artillery they must not be under 5 ft. 4 in. in height, or less than 120 lb. or more than 190 lb. in weight; for the cavalry they must not be less than 5 ft. 4 in. and not more than 5 ft. 10 in., or exceed 165 lb. in weight. Height over weight is a cause of rejection. "The following is the system used for calculating weight for height. From 5 ft. 4 in. to 5 ft. 7 in., 2 lb. are allowed for every inch of height. From 5 ft. 7 in. to allow 2 lb., and 5 lb. additional for each inch over 5 ft. 7 in. Example:—A man who measures 5 ft. 9 in. should weigh 148 lb.—i.e., 5 ft. 9 in. = 69 × 2 = 138 : difference between 5 ft. 9 in. and 5 ft. 7 in. = 2 : 2 × 5 = 10 : 138 + 10 = 148."

The rules laid down in the United States army for the examination for pensions appear to be more definite, and capable of a better classification as regards the degree of disability, than in our service. Dr. Marston points out that with a medical board there is "often much difficulty in arriving at a just and definite conclusion in a particular case, and it is worth considering whether this would not be greatly diminished, if not altogether overcome, by the adoption of some such expedient as a fractional expression of the degree of wound or injury in its permanent effects."

In some remarks on competitive examinations for admission into the army, Dr. Marston makes the practical suggestion that physical qualities "should count for something in a youth seeking to become a soldier, against another possessed of first-rate receptive faculties that have been 'crammed' with information, but who, in physique and physical activity, may be manifestly inferior to the first." We have a strong feeling that physical qualities have been too much under-estimated in the regulations for army candidates. We fear there has not been sufficient importance attached to the quality of the case in which the educational qualifications have been packed. Dr. Marston has also some judicious observations on the difference of opinion frequently found to exist between civilian practitioners and army medical officers as to the fitness of individual candidates which are well worthy of consideration.

There are other subjects treated of in this report to which we should have desired to call attention, but upon which the very condensed form in which they are stated and our limited space forbid us to enter. We can only say that the report is drawn up very clearly, and contains a large amount of information. We strongly recommend it to the notice of our readers.

A Manual of the British Discomycetes. By WILLIAM PHILLIPS, F.L.S. London: Kegan Paul, Trench, and Co. 1887.

THIS work, by an able botanist, gives a technical description of all those genera and species of fungi which are familiar under the names of Morchella, several varieties of which constitute excellent food, and Peziza, the pretty little red or brownish cups so common amongst decaying leaves. The systematic descriptions are given concisely with what is too often omitted in works of this kind—the etymology of the names; and excellent bibliographies follow each section. The work, as a whole, is adapted rather for a professed botanist than for the general public. It commences rather suddenly, and we would suggest to the learned author that a short general account of the Discomycetes might be introduced into the first part of the work, and that for non-professional readers a coloured plate exhibiting twenty or thirty of the typical species might be added with advantage and with very little outlay. We cannot help surmising that hereafter some morphologist will reduce the prodigious number of so-called species here enumerated to a reasonable amount. Fancy thirty-five species of Holotium and a hundred or two of Peziza. Surely a process of pruning like that which Parker and Rupert Jones performed in the case of the Foraminifera is here required.

CONGENITAL GOITRE.

To the Editors of THE LANCET.

SIRS,—In connexion with the case of "Congenital Goitre" recorded by Mr. Ormsby in your issue of Feb. 25th the following may be of interest.

Mrs. L——, thirty years of age, has suffered from a large goitre for over sixteen years. She has four children—one daughter (her first-born) and three sons. In the case of each of the sons only—that is, her last three births—this congenital goitre has existed, increasing in importance upon each occasion; so much so that the severe symptoms (difficulty of breathing and swallowing) in the last instance led me to seek a second opinion as to some method of treatment. Considering the fact that in the two previous cases the enlargements had gradually lessened and ultimately disappeared, as well as the extreme difficulty of dealing with such a patient, we decided to wait and watch, with the happy result that, just as in the other cases, the enlargement diminished, the difficulty of breathing &c. disappeared in about a fortnight, and in about three months the appearance of the neck was almost normal.

I am, Sirs, yours faithfully,

A. G. WEBSTER, M.R.C.S.

Golcar, near Huddersfield, Feb. 29th, 1888.

To the Editors of THE LANCET.

SIRS,—In reference to the letter in your issue of the 25th ult. concerning a case of congenital goitre, permit me to say that I attended a woman in her confinement about three weeks ago, whose baby, a girl, showed well-marked enlargement of the thyroid. In this case the breathing was seriously impeded—almost stertorous. I applied the familiar remedy known as goose grease, and, though the swelling is no smaller, the breathing is decidedly improved.

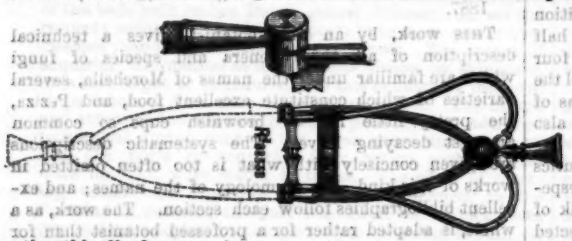
I am, Sirs, yours truly,

Madley, Hereford. T. REUEL ATKINSON.

New Inventions.

MESSRS. LYNCH AND CO.'S IMPROVED BINAURAL STETHOSCOPE.

THIS is undoubtedly an excellent binaural stethoscope. Its construction is simple, and is cleverly designed to obviate a disadvantage which experience has found to attend the employment of similar instruments. In the case of stethoscopes in ordinary use, the elastic tubing soon becomes damaged by being rapidly doubled up to be placed in the pocket or bag. In the instrument under

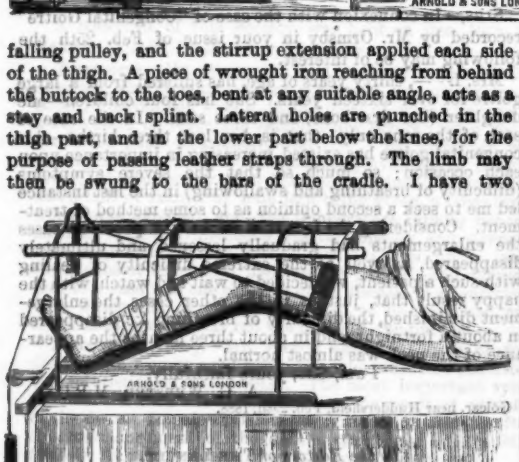


notice this disadvantage is overcome by the provision of a joint with a hollow screw, by which the convenient portability of the stethoscope is at the same time somewhat increased, and that without any detriment to its acoustic properties. We have given the instrument a careful trial, and have no hesitation in recommending it as a very serviceable binaural stethoscope.

SPLINTS FOR FRACTURE OF THE FEMUR.

THE two splints figured below represent two methods of treating fracture of the femur. The one is the extended straight position, with the stirrup extension obtained by the usual plan of strapping applied on each side of the limb below the knee. The other is a cradle with a rise-and-

falling pulley, and the stirrup extension applied each side of the thigh. A piece of wrought iron reaching from behind the buttock to the toes, bent at any suitable angle, acts as a stay and back splint. Lateral holes are punched in the thigh part, and in the lower part below the knee, for the purpose of passing leather straps through. The limb may then be swung to the bars of the cradle. I have two



holes punched in the iron which reaches behind the buttock; a band or strap can be passed through and around the trunk. I use a perineal band as well for the purpose of fixity, and to steady the splint to the limb. In children up to seventeen years of age, the straight splint, or long Liston, is the one generally used. The first splint depicted I have found most useful. It will do for either leg, and by means of the sliding slot can be used for children or adults. As a rule, it is better to have a smaller one made for children below sixteen years of age, but a full-sized splint may be used if the case is treated in a full-sized bed. It simply increases the length of the cord from the stirrup to the wheel at the end of the splint. The pulley I have attached to the splint, which is a distinct advantage, as sometimes it is impossible in private practice or colliery work to fix a pulley to the framework of a bed. The wheel on the block at the end of the splint is placed at an elevation for good traction, so that the heel of the foot is kept a finger's breadth off the bed, and the foot remains at a right angle and in good line. The limb is fixed either by means of the Scotch plan, the long sheet and pins, or by bandaging from above the ankle up. A good broad flannel spica bandage should be always applied; it gives such support and steadiness to the limb when the bedpan is used. Another broad bandage should fix the trunk. I use a perineal band smeared over with zinc ointment, to avoid any chafing. This, if wished, can also be used as a strong counter-extension by fixing it to the sliding slot, pushing the slot upwards, and fixing it with a screw. This should only be slightly made taut by the slot each morning; I trust for counter-extension by the bed being raised on blocks. The block at the end of the splint should be fixed down to the framework of the bed by two pieces of bandage. This splint is useful in hip-joint disease. The cradle is meant for cases o fracture of the neck of the femur or lower third of the bone, where the bent position is the more desirable to place the limb in for comfort and readiness in the use of the bedpan; this position is the best. The traction I have obtained by the stirrup strapping applied on each side of the thigh, the cord passing over a rise-and-falling pulley, the latter fixed at any suitable angle desired. The shortening that occurs in cases of fracture of the femur will, to my mind, entirely depend on the character of the fractured ends rather than upon any special mode of treatment. To obviate this, the extension method, with the stirrup strapping, seems the best after the irritable condition of the muscle has subsided.

R. NELSON JONES,
L.R.C.P.L., F.C.S., M.R.C.S.

LANGE'S ENEMA NOZZLE.

THE difficulties which have hitherto attended the self-administration of enemata are considerably lessened by the invention of Mr. H. J. Lange, of 47, Arthur-road, Tollington-road, Holloway, N. The construction of this patent nozzle is very simple, and its nipple can be easily inserted into the rectum without fear of injury to the part being caused. After the introduction of the nipple the tube is brought between the legs to the front, and by means of a small rubber tube attached to the end the point of a syringe can be readily adapted and the injection easily carried out, as both hands are free to manipulate the syringe. During the administration of the injection the patient sits on the nozzle, which is so shaped as to cause no inconvenience.

ASHWELL'S PATENT INDICATING DOOR FASTENER.

THIS contrivance consists of a bolt fixed to the inside of a door, and a plate showing the word "Engaged" in plain black letters on a white ground, which is fixed to the outside. When the door of the apartment is bolted the word appears on the outside of the door, and when the bolt is withdrawn a nickle-plated shield appears in its place. It will be found useful for consulting rooms and other apartments where privacy is frequently or occasionally desired. Messrs. Cross and Co., 61, Shakespeare-road, Herne Hill, S.E., are the proprietors of the invention.

THE LANCET.

LONDON: SATURDAY, MARCH 17, 1888.

NONE can be more painfully conscious than we are of the limitations of our art, as illustrated in the case of His Majesty the new Emperor of Germany, whose illness is almost as much a matter of personal and domestic concern in England as it is in Germany. But it is something for surgery to be thankful for, and for the nations to be thankful to surgery for, that he is on the throne at all, and that he is now in Berlin, and Emperor of United Germany. But for this art he would not only not be reigning now, but he would not be living now, and the grief of Germany would have been even deeper still. We are in no humour to boast, or to distribute in any nice way the credit between surgeons of rival nationalities for what has been achieved. Not that, speaking generally, we would obliterate anything in the keen rivalry between the profession of Germany and that of England. This rivalry is in many ways most wholesome and stimulating, as has been abundantly and generously recognised on both sides. In the presence of any actual case of disease, even in the humblest person, the rivalry of surgeons should be merged in co-operation. The very affection for the monarch makes personal solicitude for any course likely to benefit him more intense, and any little impatience with the restraints of conjoint action more excusable; but dignity and magnanimity of bearing on the part of all His Majesty's advisers will tend almost as much to his comfort and welfare as professional skill, and will shine as conspicuously to the credit of the great profession which by efficiency at such moments as these can affect the course of history and possibly the peace of Europe.

It is not for us to enter into speculations as to the general political bearings and consequences of the change in the *personnel* of the German Empire; but the words of such a man as the Emperor FREDERICK in such a situation as that in which he now finds himself are not mere political utterances; they are invested with an importance representing rank, and range, and responsibility. There are a few notes in the communication to Prince BISMARCK which interest us, and which cannot be dissociated from what we may call the social element in the policy of the late Emperor on which he and BISMARCK set much store. Our readers will remember the great scheme for insuring working men against accident and disease. We are told that among the arrangements for the funeral of the mighty Emperor a prominent feature will be the presence, as a sort of guard, of 180,000 men who have availed themselves of this measure. It will be a curious and a creditable relief to a crowd of princes and diplomatists and men of war to see thousands of working men whose claim to a place in the pageant is their being saved by State action against the misery of accident and disease. Consistently with this policy, the new Emperor tells us that he will warmly support all efforts calculated to improve the economical prosperity of the different classes of society, to conciliate opposing interests, and, as far as possible, alleviate unavoidable perplexities, without raising undue expectations of the power of the State. It is certainly desirable in States not to lessen the sense of independence in the individual citizen; but to see a great empire that might pride itself on mere glory take thought for its humbler members is a fact for all Governments to note. In accordance with this policy of his late father is the declaration of the Emperor FREDERICK against luxury—or, as he puts it to Prince BISMARCK, "the highly luxurious life of individuals," which is apt to be noticed in a time of rapid economical movement, and which can only be successfully resisted by a generation growing up on the sound basis of the fear of GOD and simplicity of morals. The Emperor means to offer every legitimate opposition to disproportionate expenditure. These are high words from high quarters. The successful rivalry of Germans amongst us is set down to their simple modes of living. In our rich country, with all its poverty, luxury probably kills more than poverty, and this itself might be abolished if those in all grades of life would discourage the "disproportion'd sin" of English extravagance. We rejoice that the Emperor FREDERICK has reached his throne, and, whether his reign be long or short, that he has commenced it with simple and severe words, suggestive of national and personal discipline, which may well secure the continuance of a nation's supremacy.

THE multiplication of sanatoria, which proceeds space, is readily explicable. No two health resorts are precisely alike in their meteorological and telluric conditions, and it is always possible that each new claimant upon our attention may chance to fill a niche still unoccupied. Then change for its own sake is frequently desirable for the invalid, who is apt to weary of the most perfect sanatoria and to long for "fresh fields and pastures new." When we add that the facilities for travel yearly improve so rapidly as to render distance a factor of ever-diminishing importance, it is not surprising that new resorts should be springing into existence far and wide, some of them in very unlikely localities. We propose to glance briefly at those now rising into popularity upon the continent of North America.

Colorado has for some time attracted attention as a sanatorium, especially for consumptives, and we believe that it stands high in favour with our American brethren. The chief health stations are Denver, Colorado Springs, and Manitou; and the advantages claimed for them are—first, elevation, admittedly of great importance to phthisical sufferers; secondly, a dry, sunny, bracing climate; thirdly, the prospect of a home habitable with advantage at all seasons; and lastly, the chance of remunerative employment to those sufficiently recovered to return to their avocations. As regards elevation, the resorts indicated are at an altitude of about 6000 feet—a convenient height for therapeutic purposes, as experience in the Alps would tend to show. Probably the two last-mentioned points constitute the chief claims of Colorado on our attention. The Alpine resorts are (rightly or wrongly) deserted in summer, and they offer no prospect of pleasant or paying work—fatal drawbacks in a very considerable number of cases. Colorado is, we understand, as healthful in summer as

in winter, and work, if somewhat rough, is plentiful and well paid.

California has strong claims upon our notice, but it must always be understood that it is only the southern littoral region that can be confidently recommended, and that many parts (including the neighbourhood of San Francisco) must be shunned by the consumptive. The best known places are Los Angeles, San Diego, and Santa Barbara. The climate is very bright, dry—in some places too dry,—and bracing. On the other hand, the variations at night, and from sun to shade, are considerable, dust storms are not unknown, and droughts are frequent and often prolonged. For incipient cases, and for the robuster type of invalid, Southern California presents great attractions, but we must be guarded in our recommendation of it to patients with well-developed disease or much debility.

Florida has of late come rapidly to the front, and has been alternately abused and lauded to the skies. The explanation of this inconsistency is probably that the State contains many localities of very different value as sanatoria, and that invalids should be thoroughly well informed before making a final choice. In some places the climate is damp and windy, malaria is common, and the comforts of civilisation are less apparent than the roseate pictures drawn would lead the unwary to anticipate. Other places, again, have the advantages of pine forests, a dry sandy soil, and fair accommodation. Experience shows that while some patients fare admirably in Florida, others receive nothing but injury from the climate, which on some persons seems to exercise a remarkably stimulating influence, beneficial or the reverse according to individual type of constitution and state of health. Of the favourite localities in Florida, we may mention Winter Park, and Altamonte in the neighbourhood of Tampa.

Nassau in the Bahamas is worthy of notice and of decided approval for cases such as those that benefit by a residence at Madeira. The climate is warm, moist, singularly equable, and the accommodation is admirable. It is easily reached by steamer, either direct or *vid* New York, and the voyage is rather an additional recommendation than a disadvantage. The drawback to Nassau, as to all warm, moist, and equable resorts, is that it may relieve the patient's pulmonary symptoms and conduce to his temporary comfort and well-being at the cost of lowering constitutional vigour. It suggests itself as likely to prove especially serviceable in cases where a response to bracing climatic conditions is not to be hoped for.

Minnesota, with its chief towns, St. Paul and Minneapolis, offers a climatic type precisely opposite to that of Nassau. The winter is very dry, cold, and bracing. Good circulatory power, fair digestive vigour, and a tolerably sound nervous system are indispensable conditions of risking the frost-bound winter of the north-west regions. The chief drawback to these districts is the trying and unhealthy period which accompanies the annual melting of the snow.

We thus see that the great North American continent offers a wide choice of sanatoria, and the difficulties in practice arise not from any paucity of health resorts of the most various types, so much as from our frequent inability to predict confidently what set of climatic conditions is most likely to afford the maximum of benefit to any particular case in hand. Colorado is certainly worthy of a thorough trial in the class of cases in which Davos has won its fame; California may for certain cases be occasionally substituted for the Riviera or Algiers; while, as already hinted, Nassau may prove a welcome change to patients who benefit by a stay at Madeira, but weary of the monotony of life there.

We draw attention to these various localities not for the purpose of insisting upon their superiority to other favourite resorts, but rather to suggest to practitioners alternative sanatoria which they may advantageously recommend in certain cases.

A CLASS of progressive amyotrophies exists in which the muscular wasting is altogether independent of any lesion of the nervous centres or peripheral nerves, and this is best known as primary progressive muscular atrophy. It occurs under different forms, and exhibits a tendency to affect some groups of muscles in preference to others. There may be a false hypertrophy of muscles from an overgrowth of fat, or the amyotrophy may be manifested as a simple lack of tissue. In pseudo-hypertrophic paralysis the *début* of the disease is made in the lower extremities, and the muscles most involved are the triceps in the thigh and the antero-external muscles of the leg. The affection may invade later the other muscles of the lower extremity; but in some, particularly the calf, are generally respected. The upper extremities and the face may also become wasted. The hereditary variety of LEYDEN and MŒBIUS corresponds to the above in its general localisation. In the infantile form of progressive muscular atrophy the onset is in the face by the orbicularis of the lips and of the eyes. Other facial muscles may be taken, but the masticators and the muscles of the ears are never affected. The upper extremities may follow suit, and the muscles first and most affected are the deltoid, pectorals, latissimus dorsi, the lower part of the trapezius, the serratus magnus, and the rhomboids in the arm the biceps and brachialis anticus, but atrophy of the triceps follows closely that of the preceding; in the forearm the long supinator. The other muscles of the upper limb are often invaded in turn, and especially the radials and pronator, but there are some which resist the atrophy longer than others, and foremost amongst these must be placed the long flexors of the digits. And the inferior extremities may suffer, later as a rule. The juvenile form of ERB is almost identical with the preceding, the face generally remaining free. Finally, certain transitional forms are found in which the atrophy first overtakes the legs and the upper extremities, and the face may be simultaneously overtaken. On the trunk, as an extrinsic muscle of the shoulder, the latissimus dorsi is perhaps the most frequently affected muscle of the whole economy. On the other hand, there are certain regions invaded very rarely: the hand, and especially the interossei, escape. In drawing distinctions between the varieties of myopathy, it is most important to note that the difference between them is one of place of onset. There is an unequal participation of muscles in the wasting. Evidently groups can be constructed according as some appear disposed, others refractory, to the atrophy; whilst intermediate degrees of resistance or tendency may be recognised. What may be the cause of

predisposition, and why are some muscles refractory? The conclusion forced upon M. ONANOFF from this study is thus given in his own words: "The results of the researches are conducive to the establishment of a law of correlation between the degree of predisposition of the muscles to waste and the degree of rapidity of their development; it has been shown that there exist in certain cases for the muscles as for the nervous centres a connexion between pathological anatomy and embryology."

THE question whether infectious hospitals should preferably be of a temporary or of a permanent character has been a prominent one during the exceptional prevalence of small-pox in some of the northern districts of England, and at Nottingham, where a new infectious hospital is about to be erected, an attempt has been made to ascertain the views of the medical profession on the subject. The actual source of the first expression of opinion is not clear, but a large body of local "physicians, surgeons, and general practitioners of medicine and surgery" addressed the mayor and corporation to the effect that it is "a first essential for an infectious hospital that it shall be constructed so that it may be of itself readily and with certainty disinfected"; and it was added that since this can only be accomplished by heat it is necessary that the walls shall be of iron. Another "essential" was that such a hospital must be movable, "not always on the same plot of ground, and therefore temporary in its character." This document received in the first instance no less than forty-nine signatures, but five of those signing it subsequently changed their views, the number being thus reduced to forty-five. Shortly after this the Nottingham Medical Society discussed the subject, and, with only two dissentients, they passed a resolution favouring, among other things, the erection of "permanent buildings." The two resolutions containing these contradictory opinions have been submitted to us by Dr. CHARLES BELL TAYLOR, who very properly regards the subject as one of more than local importance.

In making a few comments on the subject, we feel at the onset at a loss to understand what is meant by "essential" in its application to heat, iron, and temporary structures. We have now many infectious hospitals in various parts of the kingdom which do not embody a single one of these essentials, it being claimed by those conversant with the working of those buildings that they are in every way efficient; and until this contention can be disproved it will be quite useless to declare that these institutions lack the very essentials that are necessary to a satisfactory result. But it will be well to take up the several essentials *seriatim*. In the first place, iron walls are held to be necessary. If anything short of walls not less than some twelve or fourteen inches in thickness is intended, then we have plenty of proof to the effect that, in our climate, it is practically impossible to maintain throughout such buildings the equable temperature which is necessary to the proper treatment of the sick, and which can alone justify their removal from the substantial dwellings which they have occupied in health. And no mere padding between two layers of iron can be regarded as satisfactory, since the padding would tend, on the occasion of any breach in the ironwork, to become a nidus of infection. In the next place, disinfection of the building by heat is called for. How this is to be carried out is not explained. There have, indeed, been proposals to run a burning flambeau over the surface of iron walls, but no one having knowledge of the probable nature of infection has, so far as we know, ever maintained that any such process could be efficient. Besides which, the floors would, we assume, also have to be of iron, for cement would obviously be as porous when used as a flooring as on the wall, where it is apparently held to be improper; and since an unceiled building would hardly be thought of in the case of the treatment of the sick in winter, the ceiling would also have to be of iron. And even if the framework of the windows were of iron also, great difficulty would be met with in carrying out the process. How often the heat disinfection is to be practised does not appear. We assume it would be regarded as necessary whenever a ward which had been used for one disease was to receive patients suffering from a different infectious disease. But, as to this, there is abundant evidence to show that, with perhaps the solitary exception of small-pox, hospital wards properly built in the ordinary style can be so completely cleansed as to serve without risk first for one disease and then for another; and so experience makes us doubt whether the application of heat is to be regarded as an "essential."

The truth is that in former days hospitals for infectious diseases were so overcrowded and administered that they did after a while become saturated—so to speak—with infection; but since it has been the practice to provide an ample amount of moving air for the infectious sick, and to properly administer the hospitals receiving them, no such results have taken place. And, in the same way, any need which existed for periodically changing the site of an infectious hospital must have been due to failure on the part of those responsible for the establishment to maintain, as regards drainage and otherwise, the cleanliness which is now known to be essential. Speaking generally, the disadvantages attaching to temporary hospitals are so many and so great that the counterbalancing advantages would have to be set forth in a very convincing manner, before the view that temporary structures were in any form essential to success could be regarded as proven.

Annotations.

"Ne quid nimis."

THE PRESIDENCY OF THE COLLEGE OF PHYSICIANS.

THE letter from Sir H. Pitman which appears in another column will be read with mingled feelings. It will be a matter of deep regret to the College to learn that he adheres to his previous resolution, and that even if elected to the office of President he would decline to act. We may further express regret for having unwittingly placed Sir Henry in a "false position"; but he will not, we are sure, take it amiss, if we say that, so far from our advocacy being based upon lack of "respect to the College" or "consideration" to himself, these were the very reasons which dictated our course. The College of Physicians has, in large measure owing to Sir Henry's personal exertions, attained such a position in professional estimation that the selection of its President is no longer a matter of interest to a few Fellows only,

but one which the whole profession shares; whilst the very method of election to which Sir Henry refers is by no means calculated to secure a result which should be the best for the College and the profession. It would be deplorable if the choice to so honourable an office were to be determined by cabal and intrigue; but where the door is closed to open advocacy, such evils cannot but creep in, and claims of the really deserving may be passed over because the work on which they are based has been less obtrusive, though perhaps more useful, than that of those who obtain the distinction. In all deference, then, to Sir Henry's rebuke, we feel that we should be lacking in duty did we refrain as occasion arises from expressing what we take to be the feeling of the profession in a matter the interest of which extends far beyond the College walls. Had the College retained its old exclusive character, it might matter little to those not directly connected with it to whom the direction of its affairs should be entrusted. But its position in the forefront of medical learning and of professional ethics now renders this impossible. Two years ago we were dealing with this same subject (THE LANCET, vol. i. 1886, p. 747), and then enumerated the names of several of the Fellows who were qualified, as well from their professional eminence and personal character as their standing in the College, to be chosen to guide its destinies. The same list might be repeated now, and some might desire to add to it a few names; whilst, for our part, we think now, as then, that the educational movements into which the College has entered are those with which it must always most fruitfully concern itself, and that the Fellow who is most in sympathy with these should be placed at the head of affairs. We see no reason for departing from the conclusion then arrived at. A Fellow should be chosen whose zeal and energy are well known, who would direct the affairs of the College in a manner becoming its dignity and honour, and who is keenly alive to the ethics of our profession.

THE ARMY ESTIMATES.

THE Army Estimates for the year 1888–89 show a reduction under the head of "Medical Establishments, Pay, &c.," of £19,100, of which £5000 are taken from the cost of medicines. The number of medical officers provided for, exclusive of 335 borne on the Indian establishment, is 612, consisting of one Director-General, 7 Surgeons-General, 15 Deputy Surgeons-General, 533 executive medical officers, 55 acting medical officers (the latter being medical officers on the retired list, who receive £150 per annum in addition to their retired pay), and 1 apothecary. Compared with the establishment of the preceding year, this shows a reduction of 4 administrative and 26 executive officers, and an increase of 1 acting medical officer. No provision is made for surgeons on probation at Netley, as Mr. Stanhope has intimated that, owing to reduction of the number of medical officers to be employed, there will be no admissions into the department during the current year. We observe, however, that a sum of £700 is taken under the head of "Allowance to the Examiners of Candidates for the Medical Service." We presume this is inserted in case it should be found necessary to hold an examination before the year expires, as the War Office would not be likely to pay such a sum if no candidates were examined. The total pay of medical officers is estimated at £236,700, with £4850 for the Headquarters' Staff. A sum of £6000 is taken for the pay of Militia surgeons, and of £5400 for certain medical practitioners and medical officers of military prisons. There are £20,000 for medicines and surgical instruments, but in this is included also the supply for the Militia. The retired pay of medical officers is estimated at £188,482; the numbers on the list are 478, being 32 more than in the preceding year. This increase is no doubt due to the large number who entered the service in 1857–58–59, and who are now being retired under the age clause of the Medical Warrant. The sum of £1400 is, as usual, taken for the rewards to medical officers for meritorious services. The strength of the Army Hospital Corps is stated at 2400, being a reduction of 200 upon the preceding year; of this reduction, 111 is in the force employed in Egypt, 86 at home, and 3 in the colonies. It seems very doubtful how far it is judicious to reduce so useful a corps, and one of which the value depends greatly upon the men being thoroughly trained to their duties. No information is given in the estimates as to the number of female nurses now employed, but we observe there is a reduction of £128 in the vote under which they are included, but as it covers also extra duty pay of regimental hospital orderlies and miscellaneous labour no conclusion can be drawn respecting them. With reference to the recent report on the subject of the insanitary condition of the Royal Barracks, Dublin, we observe that, in addition to a sum of £35,000 towards building the new barracks now in progress of erection, £13,450 are to be taken for the improvement of the barracks, including in that sum £600 to improve the drainage of the Royal Barracks and Arbour Hill, and £100 to reconstruct the drainage of Richmond Barracks. The total amount asked for under the head of "Barracks" is £114,707 at home and £10,061 abroad. We also observe under the head of "Army Sanitary Committee" a sum of £1150, being the "allowance of £3 3s. a day, when employed, to one civilian member, and contingent expenses of the committee."

DEGREES FOR LONDON STUDENTS.

ON Monday last, in the House of Lords, the Lord President of the Council officially informed Lord Herschell that a small Royal Commission would be appointed to inquire into and report on the various schemes for developing higher education in London, as announced by us on the 3rd inst. The appointment of a Royal Commission, if its numbers are small and its report be not long deferred, has such obvious advantages in permitting everyone interested to be heard in person, that the Government has evidently chosen a wise line of action on the question. We have again and again urged this course as being the most satisfactory to the profession since last spring (*vide* THE LANCET, May 21st, 1887), although some of the interested bodies would have preferred being heard by counsel before a committee of the Privy Council. We suppose that the medical schools will take steps to ensure their having a due representation on the Council of any future University that may be formed, as this is obviously a wise and judicious precaution in their own interests, and when this has been done the full case will be ready for the judgment of the Royal Commission. The names of those recommended as Commissioners is awaited with much interest.

ISOLATION OF INFECTIOUS FEVERS IN LONDON.

ACCORDING to a recent report presented by Dr. Dudfield to the Vestry of Kensington, a further step is likely to be taken in the direction of constituting the Metropolitan Asylums Board the isolation authority for the metropolis. Under the Sanitary Act of 1866, which in some important respects still applies to London, persons suffering from infectious diseases can only be compulsorily removed to a hospital out of their districts provided the Local Government Board have, under order, declared the hospital to which they are to be taken as "situated within a convenient distance of the district." Since there are only six Asylum Board hospitals, whilst the sanitary districts of London number forty, it is obvious that the matter presents considerable difficulties; and in view of this, certain of the

sanitary authorities have applied to the Local Government Board to issue an order declaring one or more of these hospitals to be within a convenient distance of their districts. The Local Government Board have, in the first instance, referred the request to the Managers, who, having considered it, state that, whilst they have no observations to offer on it, "they will be prepared to carry out any instructions which the Local Government Board may issue in reference" to the matter. This implied willingness on the part of the Managers is of the more importance because the power which magistrates possess of ordering patients into the hospitals is dependent on the consent of the superintending body of the hospital in question being obtained.

INTRA-TRACHEAL SPRAY.

DR. A. F. MODESTOFF has published as a graduation dissertation an account of some investigations made by him in Professor Sushchinski's laboratory in St. Petersburg on the administration of powerful drugs to dogs by means of spraying into the lungs from the trachea. The instrument used was something like a hypodermic syringe needle with a lateral orifice; this needle was connected with a small spray apparatus, the reservoir being in the form of a test tube and graduated so as to show how much of the liquid had been used. As, of course, it was difficult to prevent the animal's struggles from interfering with the operation, it was found advisable, after shaving the front of the neck, to expose the larynx and to fix it. The needle was then inserted into the trachea so that the orifice should look downwards. When water or indifferent solutions were used no effect was produced on the respiration or blood pressure which was taken in the femoral artery. When, however, solutions of active drugs—such as curare, strychnine, cocaine, and atropine—were employed, a very prompt effect was produced, frequently in about ten seconds. It was found, too, that the effect was greater as well as more prompt than when the same doses were administered by the mouth, the rectum, subcutaneous injection, or even than when introduced into the venous circulation. Of course Dr. Modestoff does not propose that under ordinary circumstances this method of administering medicine should be adopted for human beings, but he thinks that it may possibly be advantageous where prompt action is of the last importance—as, for example, in some cases of poisoning, and in hæmoptysis, where other methods of treatment have failed. He quotes, also, the experience of Jousset, who, as long ago as 1874, saved the lives of two patients suffering from a very grave form of malarial fever by injecting a solution of quinine into the trachea. He also suggests that in cholera the physiological solution of chloride of sodium might be employed in this way. Again, in cases of disease of the respiratory passages where tracheotomy is indicated, he thinks that perhaps the intra-tracheal spray might sometimes serve. One observation was made on a human patient, a man on whom tracheotomy had been performed for Stoerck's blennorrhœa. A single spraying of a fluid ounce of the physiological solution of chloride of sodium, at a temperature of 60° C. (which previous experiments had shown to give a spray of about 38·5°, or a little above the temperature of the healthy body), was sufficient to cause a quantity of inspissated crusts to be coughed up, with the result of making the patient feel very much relieved. The spray was repeated several times, causing no inconvenience or unpleasant symptom. An interesting table is given by Dr. Modestoff, showing the change of temperature caused by the formation of spray. Thus the temperature of the room being 20° C., that represented the only temperature for the liquid which underwent no change, or at which the temperature of the spray was 100 per cent. of that of the liquid in the reservoir. When the liquid was 15° C., the spray was at the first half-minute 17°, at the the second 18·5°, and at the third 18·5°, the maximum percentage of the original temperature shown by the spray being 123. Of course, when the liquid was warmer than the air the process of atomisation cooled it, so that a liquid of 40° C. gave a spray of 32° during the first half-minute, and of 31° during the second and third half-minutes—i.e., it was cooled to 80 per cent. of the original temperature; while a liquid of 90° C. fell to 50·5°—i.e., to 57 per cent. This shows that care must be taken to ascertain the effect of the process of atomisation on the temperature of the liquid before arranging the details of the operation.

HEALTH OF CALCUTTA.

THE report of the health officer of Calcutta for the last quarter of 1887 shows very satisfactory results. The total deaths amounted to 3197, or in the annual ratio of 27·41 per 1000 of the population. This is lower than in any year of the preceding decade. Fevers were the class of diseases which gave rise to the greatest number of deaths, amounting to 1031, or in the annual ratio of 8·84 per 1000, which is lower than in any of the ten preceding years except 1883. The deaths from cholera were only 105, being rather under half the decennial average, and less than in any year except 1879. Bowel complaints also show a reduction of nearly one-fourth, and there were no deaths from small-pox during the quarter. The water supplied by the municipality was analysed regularly, and found to be satisfactory; but the results were very different in the case of tank water, of which 28 samples were analysed during the quarter, and all condemned as unfit for use. Of 102 samples of ghee received for analyses, 42 were found to be adulterated, and fines varying from five to twenty rupees inflicted. Dr. Simpson states that "the practice of adulterating ghee is completely checked, and adulterated ghee is scarcely to be met with nowadays except in some poor vendors' shops, but these are generally prosecuted and fined." A vigilant supervision appears to be exercised over the meat, fish, and vegetable supplies, as shown by the amount condemned and destroyed as unfit for human consumption. The drug shops and dispensaries were also visited, and medicines found unfit for dispensing were seized and destroyed.

A NEGLECTED FACULTY.

THE great value of exactitude in expression has long been recognised as a canon of art. Even in the pre-Raphaelite era of painting, anatomical truth frequently stands out as a redeeming feature amid much absurdity of mystical representation. So, in music and in literature, a style happily adapted as the clothing of ideas is as much a necessity for successful production as the guarantee of a master's workmanship. How is it, then, we may inquire, that so little care has been taken to educate the efforts of the middle-man, whose aim it is to understand such masterpieces, and with them to instruct or amuse his fellow-men? We will not now concern ourselves with the shortcomings of some who by bad arrangement mar in the eyes of onlookers the successes achieved by brush and pencil. There is something natural and even professional, however, in raising an objection to the hopeless blundering of another large class of offenders, who daily hurt the senses of their hearers by faulty rendering of sung or spoken composition. The evil will doubtless diminish as the art of elocution continues to develop. Its practical extinction need hardly, we fear, be expected for many years to come; but it is nevertheless a thing to be desired and striven for, not only in the interest of taste, but in that of health. Alike, if we regard the theme to be expressed, the feeling of the hearer, or the value of mere physical relief to the

speaker or singer, if long engaged in the work of enunciation, we can form but one opinion on this subject, since the attainment, and especially the maintenance, of an effect and the economy of effort in delivery are obviously dependent on proper management of the voice. For all concerned in public utterance, elocution is therefore a matter of much consequence. Were scientific method more closely followed by those who are so occupied, we should probably hear comparatively little of such complaints as the sore throat of preachers and vocalists. Nor is any elaborate course of instruction necessary in order to acquire this power of self-control in using speech. Some practical hints as to diet, posture, exercise, method in the inspiration and exhalation of breath, with a few details as to articulation, emphasis, and other matters native to the subject, are easily within the capacity of most persons, and if adhered to will confer a power and facility otherwise unknown. For short and carefully stated remarks on this important topic we may refer our readers to a small pamphlet by Mr. D. J. Macfarlane, entitled "Hints to Singers, Speakers, and Readers." The directions given therein are particular, concise, and by no means tedious.

THE GREAT NORTHERN AND CENTRAL HOSPITAL.

WE lately noticed that the committee of the Islington Jubilee Fund had seen its way to forward a second sum of £2000 to the building fund of the above hospital. It is expected that the committee will be able to send yet more to the fund. It is announced that by the legacy of Mr. Quinn the hospital will receive a sum of £5000, *minus* legacy duty, which, by the way, is very heavy. It is hard that the State should take 10 per cent. of what is left to charities, and yet itself do nothing to support the hospitals. In other countries the State maintains the hospitals. In ours this duty is not only thrown on private individuals, but even their charity is taxed. We commend this hardship to the consideration of the Chancellor of the Exchequer, who is a fair-minded man. Professor Leone Levi has within the last few days sent a cheque for 100 guineas to the hospital, under one of the rules which allows such a subscriber to have a bed called after his name. Professor Levi was one of the most ardent promoters of this new hospital before he was laid aside with serious disease. This last gift shows that personal suffering has only deepened his charity and his sympathy.

ONE METHOD OF CIRCUS TRAINING.

IT is an open secret that the course of training undergone by circus performers frequently implies a degree of physical strain which is nothing short of downright cruelty. When this is voluntarily endured, pity mingled with reproach is the feeling with which we naturally regard the suffering devotee. When, on the other hand, it is imposed on an unwilling subject, we are guilty if we seek to suppress a natural sense of its criminal injustice. It is well for the credit of mankind and of civilisation that feeling is usually in this case allowed to have its way. Anything more brutal, cowardly, and debasing than some dark phases of the training process it is difficult to conceive. What, for example, can be said in extenuation of the conduct of a rascal remanded the other day at Manchester for beating a child of four years old till his body was a mass of bruises, "to make him learn"? The magistrate who tried the case evidently could not, without deliberation, measure in legal terms the ruffian savagery of this offence. It is much to be desired, in view of a possible tendency among unscrupulous "artistes" to defend such cruel usage on the plea of necessity, that no false idea of clemency will save the culprit from receiving, on further consideration of his case, the heaviest penalty which the law can impose.

AROMATIC COMPOUNDS IN HUMAN SWEAT.

IN a recent research published in the *Zeitschrift für Physiologische Chemie*, xi., 501-507, A. Kast has obtained some interesting and important results from the analysis of human sweat. The importance of such an analysis is obvious on account of the correlative functions of the skin and kidneys. The occurrence of indigo compounds, for example, in cases of chromidrosis, has already been noted, and phenol-sulphonic acid has been shown to exist in the sweat of sheep. For the present investigation large quantities of sweat (from eighteen to twenty litres) were obtained by the use of the hot-air baths. After adding excess of absolute alcohol and sodium carbonate till it was faintly alkaline, the sweat was evaporated to a small bulk on the water bath. The relation of sulphuric acid combined as sulphate to that combined as ethereal hydrogen sulphates was then determined in the concentrated sweat as well as in the urine collected at the same time, the quantity used in each case being 200 cubic centimetres. The relation was found to be as follows:—

Sweat ...	11·009	inorganic sulphate :	1	ethereal sulphate
Urine ...	16·020	„	„	1	„

Ten grains of salol were then administered in three days to the same patients, the quantity of the ethereal hydrogen sulphates in the urine being made thereby to increase.

Sweat ...	9·504	inorg. sulphate :	1·0	ethereal sulphate
Urine ...	1·000	„ „ :	1·339	„ „

The sweat, therefore, unlike the urine, remains fairly constant in composition. The following relation was also found to exist with regard to the chlorides, phosphates, and sulphates:

	Chlorides.	Phosphates.	Sulphates.
Sweat	1 :	·0015	·009
Urine	1	·1320 :	·397

Mere distillation of the sweat readily yielded phenol, which was recognised by means of Millon's reagent. The presence also of aromatic oxy-acids was shown by acidifying the sweat with hydrochloric acid, shaking with ether, evaporating to dryness, dissolving the residue in water, and adding Millon's reagent, when the characteristic red colour was produced Jaffe's test gave a red colour, indicating the presence of scatoxyl; but indoxyl-sulphuric acid, according to the same test, was not found. The blue colour of the sweat in chromidrosis is suggested by the author to be due to the action of bacteria.

LIFE ASSURANCE IN 1887.

A PARLIAMENTARY PAPER just issued gives publicity to the insurance companies' returns deposited during last year with the Board of Trade. The summary tables which accompany this return show that the progress of this admirable form of thrift continues unabated. The aggregate premium income of the reporting offices (premiums paid for annuities being included in the term) has increased from £16,998,000 in 1886 to £17,484,000 in 1887—an augmentation of upwards of £486,000. Payments in the shape of benefit have likewise increased, though not in the same measure, and the largest item on the credit side of the account is the addition to the life and annuity funds, which figures at very nearly £4,320,000. It is a significant and only very partially satisfactory feature of the present account that, notwithstanding the enormous addition made to their invested capital, the ordinary life assurance companies have had to submit to a diminution in the aggregate amount of their income from interest. The industrial companies have been more fortunate in this respect, and upon the whole there is abundant reason for congratulation on the life assurance record of 1887. A very interesting table—which is, we believe, new this year—gives

the total number of policies in force, as disclosed by the latest valuation returns, as 785,518, and the total amount of assurance held by the public under these policies as £421,061,768—a liability which, gigantic as it is, may be viewed by all parties concerned, debtors and creditors alike, not only with equanimity, but absolutely with a lively satisfaction.

ANNUAL REPORT OF THE PEABODY DONATION FUND.

THE annual report for the year 1887, just issued by the trustees of the Peabody Donation Fund, gives a thoroughly satisfactory account of their stewardship of the princely gift of the late Mr. Peabody for the benefit of the poor of London. Mr. Peabody gave various sums between the years 1862 and 1873, amounting in the aggregate to half a million, for the purpose of providing improved dwellings for the working classes, the net rental being invested from time to time and added to the capital. The report tells us that on Dec. 31st last the fund amounted to £935,570, and had very nearly doubled itself. By means of the fund the trustees had provided at the end of last year more than 11,000 rooms, without counting bath-rooms, laundries, and wash-houses, which were occupied by a population of 20,279 persons. The rooms were let in more than 5000 tenements, including 74 of four rooms, 1782 of three rooms, 2351 of two rooms, and 807 of one room. It is stated that the average weekly earnings of the head of each family in residence at the end of the year was rather less than 24*s*; and the average rent of each room only slightly exceeded 2*s*. With reference to the vital statistics of the population residing in these Peabody Buildings during last year, the report gives the following information. The population on Dec. 31st showed an increase of only 51 upon the number at the beginning of the year. The birth-rate was equal to 41·8 per 1000, exceeding by 10·1 the general rate in London, although the proportion of persons aged between twenty and sixty years in the population was considerably below the mean proportion in the whole of London. The death-rate, on the other hand, was 18·7 per 1000, and 0·9 below the general London rate; it is stated that this death-rate includes those deaths of residents of the Peabody Buildings recorded in hospitals. It should be stated that the age-distribution of the Peabody population differs very materially from that of the entire London population, but not in a manner seriously to affect its death-rate, as the effect of the excessive proportion of children under five years is very nearly compensated by the abnormally small proportion of elderly persons. It should be remembered, however, that no inconsiderable proportion of the deaths among the artisan and labouring classes occurs in the workhouse infirmary, and there can be no doubt that a certain proportion of the population of the Peabody Buildings constantly drift in the same direction, although, probably, few are transferred direct from the buildings to the workhouse. This is one of the greatest difficulties which stand in the way of constructing satisfactory mortality statistics of the residents of improved dwellings. The death-rate in the Peabody Buildings, however, even if we could correct it by adding a fair proportion of the deaths in workhouses, would still be remarkably low for a working-class rate of mortality; indeed, it is not easy to overrate the beneficial effect of the Peabody Trust, and of similar agencies for improving the dwellings of the poor, on the health of London. Perhaps the most sensitive, and at the same time the most thoroughly satisfactory, test of the sanitary influence of improved dwellings is the rate of infant mortality. The report before us states that the deaths of infants under one year of age were equal to 141 per 1000 registered births, which was 3 below the mean rate in those dwellings in the preceding five years, and 17 below the mean rate last year in the whole of London. To measure the full effect of improved and really sanitary dwellings on infant mortality, we should compare the Peabody rate with that prevailing in some of the districts in London in which the population belongs mainly to the working classes. With this view it will be useful to note that the rate of infant mortality last year was equal to 215 per 1000 in Stepney, 225 in St. Martin-in-the-fields, 228 in Holborn, and 276 in St. Olave, Southwark. There is evidently still a large and fruitful field for the operation of such agencies as the Peabody Fund, and it is eminently satisfactory to bear in mind that the conditions of the Trust secure a constantly increasing power of enlarging the scope of its usefulness.

THE LATE EMPEROR OF GERMANY.

THE Emperor of Germany has at last succumbed to his remorseless and invincible foe—old age. The medical incidents of his last illness present no features of special interest. For some time he has been in frail health and his life has been hanging on a very slender thread. The feeble action of the heart was the cause of several attacks of faintness, more than one of which threatened to end fatally. But in the intervals he recovered full mental power, took food fairly well, and hopes were entertained that he might weather even this storm. But these periods of improvement became more and more interrupted, and at length death was instantaneous from sudden and complete failure of the heart. We believe that a post-mortem examination was made, but the only detail that has been published is that a calculus was found which explained much of the suffering the Emperor had lately experienced. It is a remarkable coincidence that the mightiest Emperors of modern Europe the victor and the vanquished of Sedan, should both have suffered from calculus. No doubt future historians will duly record this fact, and the two calculi promise to be historic stones.

THE CANCER BACILLUS.

THE recent alleged discovery by Scheurlen of a "cancer bacillus" has not received much confirmation as yet. Indeed, in this country the failure of Messrs. Ballance and Shattock, in their carefully conducted experiments, to obtain any such microbe by cultivation of morbid growths has sufficed to make us extremely sceptical of the results declared by Scheurlen. The subject has been again discussed in Germany, for at a recent meeting of the Berlin Clinica Society[1] a paper was read by Dr. Emil Senger, in which much the same ground was traversed as that covered by the above observers. Dr. Senger pointed out that the arguments in favour of cancer being infectious were based upon the mode of its dissemination through the body, the occurrence of cases of acute miliary carcinoma, the supervention of cancer on chronic cutaneous irritation, and, less convincingly, upon the occasional occurrence of "cancer by contact." At the same time, the fact that the secondary growths reproduce the characters of the primary within tissues of wholly different nature formed a marked distinction from those infective tumours that are ascribed to the action of bacterial organisms. In tuberculosis and actinomycosis (he might have added syphilis) the tumour is composed of indifferent cells, which are homologous with the elements (connective tissue) in which they occur. In fact, there is no instance known of a bacterium giving rise to heteroplastic growths—i.e., composed of cells dissimilar to those occurring at the seat of infection. The cancer microbe, if such there be, must then be intimately associated with the cancer cell or its nucleus, a relation which would therein differ from what is ordinarily believed to exist between the cell and the

[1] Berl. Klin. Wochenschr., Nos. 10 and 11.

microbe. The problem is rendered more difficult from the fact that hitherto cancer has never been successfully inoculated upon the lower animals. We all know how the inoculability of tubercle was proved long before the bacillus tuberculosis was discovered; and the failure of such experiments with respect to cancer (which Dr. Senger himself has repeated with equal non-success) affords additional evidence of the difference between tubercle and cancer as regards their respective degrees of infectivity. It may be that the failures depend on the inability to select an appropriate locality in the body for inoculation of cancer, or to employ cancer of a special histological kind or in a special stage of growth, as being more virulent in the one than the other, or, what is very probable, upon the animals selected being insusceptible to cancer. These and other explanations may be proffered to explain the very limited infectivity that cancer seems to possess. As to Scheurlen's bacillus, Dr. Senger repeated the experiments upon which that discovery was based, making numerous cultures of portions of cancerous tumours upon various media (gelatine, agar, blood serum, and ascitic fluid), without obtaining a micro-organism which could be recognised as specific; and although in one instance he did encounter a bacillus having characters similar to those described by Scheurlen, he proved satisfactorily that this bacillus was due to the potato upon which the culture was made. He did not think the question would be solved until new methods of cultivation were introduced, and he discountenanced bacteriological study before the transmissibility of cancer was proved.

RECRUITING FOR THE ARMY.

THE annual report of the Inspector-General shows the number of recruits who joined in 1887 to have been 31,225. This was 8684 less than in the preceding year, but was the full complement required. In consequence of this reduction in the numbers to be raised, the authority given in 1886 to enlist eligible recruits under twenty years of age who were one inch below the minimum standard of height, or within an inch of the prescribed chest measurement provided they were not less than thirty-three inches, was cancelled. No information is given as to the number of recruits rejected in 1887. Of 31,225 who joined the service 11,506 came from the militia, and of these 5778 had not served one training. During the year 33,597 recruits joined the militia, of whom one-third, therefore, subsequently joined the regular army. The number of soldiers invalided during the first year of service was 289, being in the proportion of 9·2 per 1000 recruits joined. A table in the appendix shows the proportion invalided per 1000 men under three years' service to have been 11·65, a lower ratio than in any of the nine preceding years. From the tables in the appendix to the report we gather that the mean strength of the army at home and abroad was 201,621; there were 1946 deaths and 2646 discharges by invaliding, being in the ratio respectively of 9·65 and 13·12 per 1000; but we are inclined to think that the numbers, especially of the invalids, are understated. The mean strength of the militia was 109,603, and the deaths reported were 421, or 3·84 per 1000, probably also under the correct amount. We observe a statement in the report relative to the proportion of recruits rejected on medical grounds in previous years to which we take exception. In 1886 the total rejections were 438 per 1000 examined, and of these 234, or upwards of one-half, were returned under the heads of "under chest measurement," "under height," "under weight," "not likely to become efficient soldiers." On this the Inspector-General remarks: "From this return it will be seen that of those rejected 17,573 were physically fit for service, but were under the standard of size fixed for recruits." But these lads, if we understand the system, were rejected without a further medical examination, and cannot, therefore, be assumed to have been in all respects eligible. No doubt a proportion of them would have been rejected for other medical reasons. It would be manifestly wrong, therefore, to assume that only 204 per 1000 of the recruits who presented themselves for enlistment were ineligible on medical grounds.

COCAINE IN TOOTH EXTRACTION.

THE employment of certain salts of cocaine, and even the alkaloid itself, in dental surgery, has now received a fairly wide trial. It must be confessed that authorities here and abroad have arrived at very various results, some averring that cocaine is in all cases successful, while others have relinquished its use. To reconcile these discordant statements is at present quite impossible; we can only indicate the best means of applying this anæsthetic, and warn against its indiscriminate use. As a rule, from half a grain to a grain of the hydrochlorate dissolved in ten minims of water, and injected into the tissue of the gum by two punctures, one on the lingual and one on the buccal aspect of the tooth, ensures a painless extraction. It is best to inject very slowly, and to wait from five to ten minutes after the completion of the last injection before extracting. However, in some persons cocaine fails entirely; nor is it possible to anticipate in whom it will succeed or in whom prove abortive. Simply painting the gum is valueless in tooth-extraction, except as a preliminary to the punctures of the hypodermic syringe, for some persons are as much afraid of the pain incident to the pricking the hyperæmic gum as they are of the more severe operation. Although many persons experience no unpleasant effects from the injection of one grain, yet a certain proportion are painfully and alarmingly upset by its action. Syncope, extreme respiratory distress, feelings of complete prostration lasting for hours, vomiting, great nausea, facial paralysis, muscular paresis, and swelling of the tongue may ensue; thick utterance has been present in many cases; while vertigo, headache, and hallucinations are not uncommon sequelæ of cocaine given hypodermically. As a rule, these symptoms, although very alarming at the time, pass off in a few hours, but may persist for days. Cocaine sometimes loses its anæsthetic powers after the first injection. Many do not recommend cocaine for prolonged dental operations, preferring nitrous oxide gas, which is sure and safe, for short procedures, while others lean to a combination of the two agents.

GERMAN PHYSICIANS IN ITALY.

AN Italian correspondent writes:—Increased attention to the efficiency of her medical schools was one of the first signs of Italy's reawakening after her unity and independence were completed. The professorial staff in her seats of learning was reinforced in many cases from abroad, and chiefly from Germany. Turin received Moleschott, Florence Schiff, Rome Boll, and Naples von Schrönn; and in each of these schools the teaching of physiology was so enhanced that their *alumni* in one essential branch of medical education need not now fear comparison with those of any other European university. Death or removal has wrought changes in this auxiliary professoriate; but while Moleschott has been transferred to Rome, von Schrönn remains at Naples, and continues the good work he has already achieved in that school. In recognition of his services, King Humbert has just made him Commendatore of the Order of SS. Maurice and Lazarus—a rarely bestowed distinction even in the political world, but merited in this case by the great value of the scientific teaching imparted by von Schrönn in the Neapolitan University, and the consequent elevation of the standard of medical doctrine and

practice throughout the southern portion of the peninsula. Dr. Otto von Schrönn is a Bavarian, having been born at Hof, on the Saalé.

PROFESSOR KUSSMAUL.

A HOLIDAY CONTRIBUTOR writes:—The Medical Faculty of the University of Strasburg on the 3rd inst. entertained at a public banquet the distinguished clinical teacher Geheim Rath Professor Kussmaul, on his changing the academic career for that of a consultant at Heidelberg. Dr. Goltz, as Dean of the Faculty, whose gifts as an after-dinner speaker are famous through Germany, outshone himself in doing justice to the toast of the evening, scoring point after point amid the rapturous plaudits of the four hundred banqueters, and emphasising each witty allusion and humorous sally with a gigantic percussion hammer and plexímeter which, in honour of the guest, he had substituted for the usual mallet of the toastmaster. He concluded by predicting that Kussmaul, though abdicating the professor's chair, will yet speak with authority in the medical councils of Europe, and that humanity will owe him an ever-increasing debt so long as his opinion and practice can be appealed to. Dr. Zöpffel, Rector of the University, made a personal contribution to the toast by dwelling on the kindly and clubable qualities that had endeared Kussmaul to his colleagues and to all with whom he came in contact; and added that if the Strasburg school ever attains the high ideal it has set itself, not only as a guiding light in science but as a bulwark of German civilisation, it will owe its success in great measure to the power and the influence of Kussmaul as a worker and a teacher. Dr. Freund, Professor of Gynæcology, was the next speaker, and after referring in humorous strain to the accident that had made Kussmaul a physician—to wit, an accident to his foot which induced temporary lameness, and with it an interval of sage reflection,—he evoked peals of laughter from his audience by hinting that, their names being identical in meaning, the Oribasius of the fourth century was no other than the Kussmaul of the nineteenth, but that the clinical teacher of Strasburg had greatly improved on his *alter ego*, the body physician to the Emperor Julian the Apostate. This was a highly effective sally, "Oribasius" being an exact equivalent in Latin for the German "Kussmaul" (literally "kiss-mouth"). Professor von Recklinghausen then gave the toast of their guest's family, and took occasion to acknowledge how much his own field, that of pathological anatomy, owed to Kussmaul's work. This remark brought up Professor Lücke, who said that, as a surgeon who appreciated the value of treatment, he could add his tribute of recognition to the catholic teaching of their guest, in honour of whom he called for a special toast, "To the Unity of the Healing Art." So ended a memorable evening, in which academic orators of exceptional brilliancy vied with each other in bidding God-speed to an illustrious colleague in a new departure in his life work.

PURPURA HÆMORRHAGICA AFTER A MENTAL SHOCK.

DR. ED. DE SMET of Brussels has recently had a case of a young woman of a highly nervous temperament who, in consequence of a severe fright, experienced an eruption of purpura hæmorrhagica, though she had never had any eruption of the kind before. Some four months subsequently, however, in consequence of a fall, a similar eruption made its appearance. The treatment was directed mainly to the nervous system, which was evidently very much affected. Dr. de Smet refers to M. Lenoir of Lille, who has published cases of various skin diseases—eczema, psoriasis, herpes, pemphigus, and vitiligo—which have followed a mental shock.

THE CONVERSION OF CONSOLS.

MR. GOSCHEN'S new Stock having been already dealt in, it is idle to put forward objections to his conversion scheme, or to dwell on the hardships which will inevitably result to investors here and there from the compulsory reduction of incomes drawn from the public funds. It is perhaps more satisfactory to consider the operation under the other aspect of the relief which it will afford to the British taxpayer; and indeed the class of taxpayers is so much larger than the class of fundholders that the popularity in a general sense of any scheme which tends to benefit the former at the expense of the latter is almost a matter of course. The reduction proposed by the Chancellor of the Exchequer will amount at first to ¼ per cent. upon the stock held or to 8½ per cent. of the income drawn from it, and this will eventually be doubled. This in the not very common case of an income drawn wholly from 3 per cent. Government stocks will be a very serious diminution, and it may be feared that many charities, among which not a few medical charities must be reckoned, will feel the pinch. In such cases it is a point to be considered whether it is not worth while to seek other and more remunerative investments for the displaced funds; and although the present high price of securities makes the duty of reinvesting one of more than ordinary difficulty, it is at least undeniable that a better return may be obtained upon carefully chosen securities of a perfectly sound description than the new stock offers. It appears to us that it will now become the clear duty of the guardians of charitable trusts who exercise discretionary powers of investment, to face this problem, and submit to no impairment of the incomes subject to their administration which it is possible by good husbandry to avoid.

HOSPITAL PROVISION NEAR BRADFORD.

THE conference which Dr. Barry, representing the Local Government Board, has had with the sanitary authorities around Bradford, who are entitled to receive a sum of money from the Corporation in compensation for their losing the right to send patients into the borough fever hospital, is already taking practical effect. The Shipley Local Board have chosen a site which they propose to utilise jointly with the Windhill Local Board; it has been decided that a pavilion shall be erected on the model plan recommended by the Local Government Board, and that it shall contain ten or twelve beds so contrived as to secure separation of diseases as well as of sexes; and the Shipley authority have unanimously determined to apply to the central authority for the issue of a provisional order uniting the two districts as a Joint Hospital District.

THE HEALTH OFFICER FOR ABERDEEN.

IT is sincerely to be hoped that candidates for the appointment of Medical Officer of Health for the City of Aberdeen will carefully consider the terms of the appointment. The holder of this office will be required to act in addition as police surgeon, medical attendant at the City Hospital, and examiner of the quality of gas, and will be further required to devote the whole of his time to the duties of the appointment. Assuming that the payment for attendance upon the police force is at the rate of four shillings per man per annum, the usual club rate, the remaining duties will be paid for at the rate of about fifteen shillings per day, for the whole salary is only £300 a year. Moreover, the medical officer of health must not be absent more than one day without leave, and is obliged to provide a substitute at his own expense when absent. Such is the estimation in which the Town Council of Aberdeen hold important medical services. The salary is

utterly inadequate, and we presume the Town Council have no proper appreciation either of the health interests of their district or the welfare of the police and of the poor who are admitted into their hospital.

DR. COE ON THE USE OF THE UTERINE CURETTE.

A VERY instructive paper on the use of the curette for the relief of hæmorrhage due to uterine fibroids was recently read before the Obstetrical Section of the New York Academy of Medicine. The author drew attention to the fact that the hæmorrhage usually took the form of excessive menstrual flux, and also that the bleeding came from the hypertrophied mucous membrane of the uterus generally, and not, as is often supposed, from that portion of it covering the projecting surface of the tumour. In support of the latter proposition, he states that the hæmorrhage is frequently out of proportion to the size of the tumour, the most dangerous attacks often occurring where the fibroid is small, but where on examination the mucous membrane is discovered to be thick, spongy, and vascular. Dr. Coe, whilst admitting that the use of the curette is only a palliative measure, contends that if the hypertrophied mucous membrane is thoroughly scraped away the danger from menorrhagia is for a time—it may be for several months—greatly diminished. The ultimate cause, of course, remains under this plan of treatment, which is intermediate in point of severity between simple medication and the more formidable operations—oöphorectomy, myomotomy, and supra-vaginal amputation; the patient may be helped over the menopause, after which period the hæmorrhage becomes naturally less, or even ceases, as the physiological stimulus no longer exists. Curetting the uterine cavity, according to Dr. Coe, is practically free from danger to life, and in the majority of cases is an easy operation, and, in fact, the more severe the menorrhagia the more likely is the surgeon to be able to practise it with ease and success. Where the os uteri is displaced upwards and the uterine cavity is narrow and tortuous, experience shows that the liability to menorrhagia is for these reasons less than it is where the canal is elongated and dilated from submucous and intra-mural growths of moderate size. Dr. Coe advises that iodine should be applied to the lining membrane after scraping with the dull wire curette, and that the application should be repeated several times.

FEVER IN LONDON.

DURING the week ending March 10th there has been an increase in the number of cases of infectious disease admitted into the hospitals of the Metropolitan Asylums Board, the patients suffering from scarlet fever amounting to 107 as against 86 in the previous week, and the cases of enteric fever to 24, or more than twice the number admitted during the preceding week. Three persons suffering from small-pox were admitted, one each from the districts of St. George-in-the-east, Mile-end, and Poplar. No case of typhus was received.

SANITATION AFLOAT.

IF Sutton or Hales, or any of the last century early pioneers of systems of ventilation applied to ships, could have joined the party of politicians, scholars, engineers, doctors, and merchants who visited the new vessel, the *Oceana*, of the Peninsular and Oriental Company, on Thursday last, they would have felt as much surprise as satisfaction at seeing to what an extent the great work which they commenced had gone on towards its completion. The *Oceana* is one of the finest vessels ever built for voyaging across to the Antipodes; she carries 6400 tons, and has full convenience for 250 passengers of the first and 160 of the second class. That she is fitted up with every luxury goes without saying, but the point that most pleased us in our survey of her was the admirable quality of her sanitary arrangements, which, under the able direction of the naval architect of the company, Mr. de Remussett, have been extended to all parts of this floating palace. The sanitary skill is best shown in the ventilation, in which the exhaust system is carried out so completely that every closet and sink is cleansed as it is used by a current of fresh air, and is transformed into a ventilator for pure air. Connected with the medical department there is a hospital, and for the provisioning of the passengers and crew with fresh food there is a refrigerator and an enormous cold storage chamber. Altogether the *Oceana* goes forth on her first voyage worthy of her name and her mission.

THE HEALTH OF LINCOLN.

THE Town Council of Lincoln have wisely decided to consider the question of placing their infectious hospital on a more permanent and efficient footing, without waiting for the stimulus which another prevalence of infectious disease might afford. It seems further necessary that a complete inquiry should be instituted into the sources of the city water supply. As now delivered, that supply is subject to variations in quality; it is at the present moment under suspicion of having caused a recent excess of diarrhœal affections; and one member of the Town Council indicated the opinion he had as to the supply as now delivered, by expressing a hope that all who consumed it knew that it would be better to have it both filtered and boiled before drinking it. It would be difficult to have adduced a much more potent argument in favour of exhaustive investigation into the sources and risks of the water supply of any city than that involved in this exhortation.

ANIMALS AND HOSPITALS FOR INFECTIOUS DISEASE.

A CORRESPONDENT has questioned us as to the possibility of dogs kept in a hospital for infectious disease proving a source of danger to the inmates of houses into which they are admitted. The reply is necessarily that it depends upon the part of the hospital which the dogs frequent. If they have contact with persons suffering from typhus, scarlet fever, diphtheria, or measles, we cannot doubt that they may play the part of carriers of contagion. Cats under similar circumstances are not unfrequently regarded with suspicion. They appear to be capable of suffering from typhus and diphtheria, and, apart from this, their coats must afford ample opportunity for the retention of dust and infective particles. Their wandering habits may take them from the wards of a hospital to the homes of children and other susceptible persons, and thus disease may arise the cause of which is apt to escape detection.

COLONIAL "ECONOMY."

WE learn from the *Tasmanian News* that the Government of Tasmania, "with a view to secure economy without impairing efficiency," has combined several appointments with that of Government medical officer. Under the new arrangement, the gentleman who has been appointed will be official visitor of hospitals for the insane and chairman of that body, health officer for the port of Hobart, officer of health for Wellington Hamlets, medical adviser to the Central Board of Health, medical attendant on paupers at their own homes, medical officer for the charitable institution of New Town, and medical attendant of the permanent Defence Force. No information is given as to the salary attached to this remarkable

pluralism, so that we are unable to judge whether the desired economy has been secured; but we may fairly conclude that it cannot have been effected without impairing the efficiency, if all these various duties are to be discharged by one officer. It would be interesting to learn how many gentlemen have hitherto been employed to fill these appointments.

HEALTH OF THE GERMAN EMPEROR.

WE are informed that His Majesty is gaining in strength, and that the cough and expectoration are less. No official bulletins as to the state of his health have, however, been issued during the past few days, and the interdict against the private communication of statements on the subject by His Majesty's medical attendants is still in force.

HOSPITAL MANAGEMENT.

THE Islington Board of Guardians had last week brought to their notice the case of a boy who, it was stated, was conveyed to the workhouse from the Northern Fever Hospital at Winchmore-hill in a state of nudity. The opinion was expressed that the boy's clothes had been destroyed as a precaution against the spread of infection, a course which all would approve; but the removal of a child a distance of six miles in this condition and after a recent attack of scarlet fever requires immediate investigation. We cannot for a moment believe that this is more than an act of negligence on the part of an official whose conduct the managers will condemn; but if the story as told be correct, the want of supervision which is thus evidenced is calculated to shake the confidence of the public in the management of the institution.

DEATHS OF EMINENT FOREIGN MEDICAL AND SCIENTIFIC MEN.

THE deaths of the following foreign eminent medical and scientific men are announced:—Dr. Skoda, medical referee for Bohemia, and brother of the great J. von Skoda, at the age of eighty-eight.—Dr. M. S. Toporoff, formerly Professor of Therapeutics in Moscow.—Dr. Leopold von Holst, for many years one of the editors of the *St. Petersburger Medicinische Wochenschrift*. Dr. von Holst, after holding various important appointments, including some connected with the Russian navy, was sent at the cost of the State abroad to profit by seeing the practice of medicine in other great European centres. He was in London about the year 1867, and occupied himself here chiefly with the construction and management of our hospitals. For many years past his health had been bad, as he suffered from chronic bronchitis and emphysema. His death, which occurred on the 6th inst., was due to pyæmia.

TREATMENT OF SKIN DISEASES.

AT the meeting of the American Dermatological Association in September last the treatment of skin diseases received much consideration. Dr. White introduced the subject of the Influence of Diet on the Causation and Treatment of Skin Disease. Dr. Piffard gave his experience of the uses of sea water and sea salt, and especially recommended white salt obtained from the natural brine wells of the interior as less expensive, more agreeable, and of decided therapeutic value. The description of the uses of medicated rubber plasters in some chronic patches of skin disease brought up Dr. Unna, who claimed a great superiority for his plasters over the American form. The removal of callosities by salicylic acid is a practice now well established. Dr. Denslow uses a saturated solution in collodion, and Dr. Wigglesworth a 20 per cent. solution in emplastrum saponis, followed by the application of equal parts of the belladonna and mercury plasters on kid. For pediculosis capitis or pubis Dr. White recommended *crude* petroleum, as not inflammable and not irritating or injurious, in preference to kerosene or distilled oils of petroleum. Lastly, Dr. Unna gave some encouraging reports of cases of leprosy treated by long-continued applications of reducing agents, such as chrysarobin, pyrogallol, resorcin, ichthyol, sulphur, &c. He uses an ointment of five parts of chrysarobin and of ichthyol, two of salicylic acid, and 100 of vaselin or unguentum simplex. For use on the hands, neck, and face resorcin or pyrogallol may be substituted for the chrysarobin. To old encapsuled lesions he applies his reducing plasters of salicylic acid with or without creasote.

ROYAL LITERARY FUND.

THE dinner of the Royal Literary Fund, over which Sir James Paget is to preside, will take place at Willis's Rooms on Wednesday, May 2nd. We are happy to report that the festival promises to be one of the most successful that has yet been held by the corporation, and that the names of stewards sent in already includes many of the leading names of the profession, metropolitan and provincial.

UREA CENTRE.

IN the animal economy centralisation is carried to its most extreme degree. It is certain, from Brown-Séquard's experiments, that there exists a centre irritation of which can suspend the chemistry of the body, making the blood in the veins flow red and reducing the temperature of the body. MM. Sée and Gley, experimenting on dogs with a view to producing glycosuria, caused azoturia by irritating the central end of the divided right vagus with a mixture of glycerine, water, and lycopodium injected into that part of the nerve after section.

THE SPREAD OF SMALL-POX.

FRESH cases of small-pox continue to show themselves in Nottingham and Arnold, and nearly thirty cases are reported from Blackburn. At the latter place some of the patients are in the workhouse.

FOREIGN UNIVERSITY INTELLIGENCE.

Leipsic.—Professor von Liebermeister, of Tubingen, has declined the chair of Pathology which has been offered to him.

St. Petersburg.—Dr. I. Karpinski, who has lectured for twenty-five years on Bandaging and Surgical Appliances, and has acted as curator of the Surgical Museum, has been elevated to the rank of Extraordinary Professor. Dr. Kohan has qualified as *privat-docent* for General Pathology, and Dr. Grammatikati as *privat-docent* in Midwifery and Gynæcology.

Würzburg.—Professor Fritsch, of Breslau, is to be offered the chair of Midwifery, vacant by Scanzoni's death.

A COMPLIMENTARY dinner to Dr. C. E. Saunders was given on the 2nd inst. by the West Herts Medical Association, on which occasion an illuminated address was presented to him. A similar compliment will, we understand, be given to Dr. Saunders on March 21st, at the Holborn Restaurant, by his colleagues and friends of the Society of Medical Officers of Health, on his resignation of the honorary secretaryship of the Association.

MR. WILKINSON OVEREND, B.A. Oxon., of St. Mary's Hospital Medical School, has been elected to the Radcliffe Travelling Fellowship of £200 a year for three years.

THE death occurred on the 9th inst., at his residence in Putney, of Dr. Robert Gordon Latham, F.R.S., F.R.C.P., the author of several works on philology, ethnology, and lexicography. The deceased, who was a Fellow of King's College, Cambridge, was for some time assistant physician to the Middlesex Hospital, where he lectured on Materia Medica and Forensic Medicine.

AT the meeting of the Royal Medical Society of Edinburgh on March 9th, the diploma of honorary membership was conferred upon Dr. John Duncan of Edinburgh and Sir Dyce Duckworth, who both held office as Presidents of the Society in 1861.

H.R.H. Princess Beatrice, Princess Henry of Battenberg, has been pleased to appoint John Williams, M.D., to be Physician-Accoucheur to Her Royal Highness.

Pharmacology and Therapeutics.

HOW TO USE CREOLIN.

IN reply to inquiries from numerous medical brethren as to the best methods of employing creolin in various classes of cases, Dr. Max Kortüm has published some additional account of his experience of this substance, the manufacturers of which are Messrs. W. Pearson and Co. of Hamburg. Solutions have at first a milky appearance, but if allowed to stand for any considerable time become brownish, owing to the resinous principles and naphthaline salts separating out. For surgical purposes two solutions are employed—a 2 per cent. solution and a ½ per cent. solution. The stronger one is used for disinfecting the hands, the instruments, and the surface of the patient's body. This has no undesirable effect on the skin or on the instruments. The weak solution is employed for irrigating wounds, for saturating tampons, and for moistening dressings, &c. Creolin has a decided hæmostatic action, and yet even in strong solutions does not act as a caustic. It may, if very strong, cause smarting, but only temporarily. In a case where a pulmonary cavity communicated with the cavity of the pleura which had been opened for empyema, copious hæmorrhage occurring some days after the operation from the lung cavity, a plug soaked in a 2 per cent. solution of creolin was inserted and stopped the hæmorrhage at once, the only unpleasant effect produced being that the sputa tasted of creolin. In cases of large burns and bedsores permanent baths of creolin water have proved very successful. In the case of bedsores Dr. Max Kortüm suspends the part affected in a pan containing a 5 per mille solution. In midwifery cases the vagina may be washed out with the ½ per cent. solution, both before and after delivery. Where the perineum is ruptured this solution has an excellent effect, when used to moisten compresses kept applied to the part. In a case of atony of the uterus post partum a plug soaked in a 2 per cent. solution proved very successful. Surgical dressings, gauze and moss applications, can be moistened every day or two with the creolin solution. In addition to watery solutions, creolin may be prescribed combined with oil or cerate, or as a powder with boracic acid as a basis. Cotton wool is also impregnated with it. The 5 per cent. oil may be used for itch or pediculi. In gonorrhœa injections of a watery solution of from 1 to 5 per 1000 are very effectual, and in vesical catarrh a 1 per 1000 solution may be injected with advantage. Both in this affection and in gonorrhœa creolin may also be given internally in pills containing from 1½ to 4½ grains each, three or four times a day.

ANTHRAROBIN AND CHRYSAROBIN.

Chrysarobin, the chief component of Goa powder, becomes chrysophanic acid by oxidation. Liebermann has attempted to recover chrysarobin from the acid, but failed, for the reduction yielded a product in which two atoms of hydrogen had simply replaced one of oxygen. Liebermann and Seidler considered that the avidity for oxygen was the mechanism on which depended the therapeutical value of chrysarobin. The *Pharmaceutical Journal*, No. 923, states that this investigation of Liebermann was only a portion of a larger one, having for its object the study of the "leuco" bodies that might be obtainable by reducing colouring substances of the anthraquinone group, in the course of which it was found that alizarin, flavopurpurin, anthrapurpurin, anthragallol, and other allied compounds, yield similar reduction products, all of which are, when in solution, readily reconvertible into the original substance by atmospheric oxidation. A quantity of the reduction products of alizarin and flavopurpurin were prepared for therapeutic purposes. Fairly satisfactory results were obtained in cases of herpes tonsurans, pityriasis versicolor, eczema marginatum, and psoriasis. Dr. Behrend reported that the product from alizarin is of similar but inferior action to chrysarobin, although more intense than pyrogallic acid. These compounds are called anthrarobin, the purpurin product being distinguished from the alizarin product by the letter *P* or *F*. Anthrarobin is freely soluble in cold dilute aqueous solutions of the alkalies, ammonia and the alkaline earths, with the development of a brown-yellow colour, such solutions absorbing oxygen from the air with eagerness, and passing through green to blue, and then to alizarin violet. It is soluble in alcohol, and may be kept unoxidised for a week in a well-corked bottle. It has the advantage over chrysarobin of producing no inflammation of the skin; it colours the skin a slight brown, yet the staining produced on linen can be removed with soap and soda.

HYGRINE.

Hygrine was obtained by Dr. Ralph Stockman from distillation of so-called amorphous cocaine with water. A drop of it placed on the tongue causes a burning sensation, and it is an extremely irritating substance. Without causing special symptoms, frogs died from the subcutaneous injection of a drop of hygrine mixed with water. Considerable irritation was caused at the seat of injection, while the muscles all over the body, the bowel, and serous membranes were studded with numerous minute hæmorrhages, due evidently to the local irritation of the particles of hygrine. Hence the importance of being certain that any specimen of cocaine is free from hygrine. Indeed, this communication is very instructive and important in connexion with the occurrence of accidents after the injection of cocaine. The benzoic ethers formed by decomposition of cocaine are also very irritating to the mucous membranes. Those interested in the chemistry of hygrine may consult the article in the *Pharmaceutical Journal*, third series, No. 922.

PROFESSOR OERTEL ON DIPHTHERIA.

III.

5. *Lymphatic Glands.*—Enlargement of the cervical and submaxillary glands is one of the most constant clinical phenomena of diphtheria, and writers have described necrobiotic changes and suppuration of them in this disease. (*a*) *Cervical* and *submaxillary glands* show numerous hæmorrhages in periglandular tissue and in capsule, and marked hyperplasia of the cells of the gland. Scattered foci, evidently necrobiotic, which stained faintly, can be seen throughout the gland, the change as a rule extending into the follicles, and occurring more in the cortical than in the medullary portion of the gland. As in other diphtheritic products, there occur a large number of large round epithelioid cells in which the nuclei are dividing and disintegrating, whilst the lymphoid corpuscles themselves show similar evidence of breaking up of chromatin and a chemical change in the nuclear juice, whereby it becomes capable of being stained by reagents. The change doubtless commences in the large round cells, and later infects the lymphoid corpuscles. At first the foci composed of the disintegrated products stain well; but as the process advances these foci become paler, and are converted into a granular mass, which is not only incapable of being stained, but undergoes the further coagulation and hyaline degeneration noted elsewhere. These foci may be limited in extent, and are then bounded by layers of normal lymph-corpuscles, whose nuclei present chromatin, diffused or in threads; but, when the necrobiosis is extending, the products of degeneration and of disintegrating nuclei are found between the layers of normal cells. In other parts

there is evidence of hyperplasia—cells with polymorphous nuclei. (*b*) *Bronchial glands* also exhibit hyperplasia and hæmorrhages, but fewer foci of necrobiosis, and these mostly in the follicle. The lymph channels may contain no normal corpuscles, but only cells with disintegrated nuclei, and the products of such disintegration (chromatin and juice); and this change may extend for a certain distance from these channels into the medullary substance; so that in the cervical glands the necrobiosis is widely diffused, but in the bronchial glands mainly restricted to the follicle—a difference due, doubtless, to the different extent of the disease in the mucous membranes whence these glands derive their lymph.

6. *Heart.*—This organ is mostly affected late in the disease—often after the diphtheria has passed away from mucous membranes. In two out of eleven cases fatal during the height of the process in the mucous membranes, lesions were observed in the heart. Small subpericardial hæmorrhages, and more rarely subendocardial, were found. These were attributed by Buhl to mechanical obstruction and physical change in the walls of vessels by nuclear proliferation; but such infiltration is often absent, and the hæmorrhages are more probably due to the changes excited in the walls by the virus in the blood. Masses of leucocytes are often met with beneath the endocardium and pericardium, or between the muscle fibres, the nuclei in many showing indications of cleavage, of decomposition of chromatin and its peripheral deposition, but not forming definite necrobiotic foci. The muscle nuclei are increased in number and size, and show segmentation and an apparent increase of chromatin, but there is no complete karyokinesis, the process of nuclear division being arrested in its first stage, and then passing into degeneration. Doubtless these nuclear changes are the precursors of the more profound lesions found in cases where death occurs from cardiac failure late in the disease. These nuclear changes occur mostly in the fibres immediately underlying the endocardium or in the neighbourhood of the coronary arteries. The muscular fibres at this stage are normal, or show only indications of commencing change. The nuclei of the muscular elements in the arterial coats are increased in size, the endothelia slightly proliferated and desquamated, whilst in the adventitia occurs round-celled infiltration similar to that in the intermuscular tissue.

7. *Stomach and Intestines.*—Diphtheritic deposit on the gastric mucosa may be occasionally formed secondarily to the pharynx and œsophagus; but, apart from such accidental lesion, the gastro-intestinal tract is liable to inflammatory changes, which especially attack the lymphatic tissue. Bizzozero described such changes in the intestinal follicular and agminate glands, as well as in the mesenteric glands; and Oertel found in three cases undoubted evidence of necrobiosis in Peyer's patches, although not to the extent described by Bizzozero. But the necrobiosis in no case had advanced so far as in the respiratory mucous membrane and glands. There was, indeed, evidence of active cell proliferation, and nuclear cleavage and disintegration; but these were intermingled with more normal cells, and had nowhere broken up into a granular mass which liquefied and coagulated. Certain large round cells occurred in parts of the follicle between the lymphoid corpuscles. There was no evidence of hyaline change in the vessels; the epithelium was for the most part retained and natural, and no positive distinction of any specific forms could be made amongst the bacteria that of course abounded. The *mesenteric glands* in these cases exhibited separate necrobiotic foci in their follicles; and a similar focus was found in one of these glands of a case that did not present any changes in the intestine. These glands were mostly swollen and hyperplasic, and the necrobiosis appeared to be in an earlier stage than that seen in the cervical glands. There was no hyaline degeneration. It is concluded that the gastro-intestinal tract is therefore seldom involved in the essential process of diphtheria, and when it is the seat of such lesion the change is a secondary phenomenon, not in proportion to the severity of the case, and perhaps depending on the extent to which disinfection of the pharynx has been carried out.

8. *Spleen.*—The changes observed in this organ, especially interesting since it can be attacked only through the circulating blood, are described in full detail in cases of various degrees of severity. These changes varied with the age of the subject—according, that is, to the degree in which the organ was developed, and the stage of the disease. The spleen was found to be more or less swollen; its capsule tense and the seat of hæmorrhages; the pulp mostly soft, bulging towards the cut surface of the capsule; the follicles mostly prominent and large. In the splenic *pulp*, hæmorrhages and hæmotidin masses could be seen beneath the capsule and in various parts of the substance, and the vessels were distended with blood. In all cases there was hyperplasia of the splenic corpuscles, chiefly around the bifurcations of arteries, so that the reticulum was largely concealed. The enlarged follicles were surrounded by a wide zone of such cells, which comprised not only lymphoid corpuscles and leucocytes, but larger round cells. Nuclear changes of two kinds occurred in these proliferated elements—viz., direct segmentation, in which the chromatin and juice underwent changes, as in ordinary karyokinesis and cell-division, and "indirect fragmentation," wherein the chromatin is broken up into small masses of various shapes and sizes, variously disposed, whilst the nuclear juice becomes capable of being stained. In this way deeply stained bodies in great variety of form were produced, but not the disintegrated fragments characteristic of necrobiosis. In the Malpighian *follicle* the changes comprise either the formation of numerous epithelioid cells, as first described by Stilling (Virch. *Arch.*, Bd. 103), or else of large round cells, which stain better than the epithelioid cells, but less markedly than the leucocytes. The kind of hyperplasia seems to be related to age, for the epithelioid cells occur mostly in young subjects. The follicles are, moreover, surrounded by a thick zone of leucocytes, which invades the follicle at various points. But here, as elsewhere (e.g., lymphatic glands), there occurs necrobiosis, commencing with nuclear disintegration, and when the process is at its height the whole follicle is seen to be beset with such nuclear products derived from the round or epithelioid cells. The change, as in the bronchial glands, stops short of widespread liquefaction and coagulation. Hæmorrhages also take place into the follicles. Lastly, in some cases of long duration, the *vessels*, of the pulp especially, undergo hyaline degeneration of the muscularis and intima.

9. *Liver.*—Here there are invariably capillary hæmorrhages beneath the capsule, and sometimes within the parenchyma; together with foci of leucocytal infiltration, which may spread between the lobules. The leucocytes show no evidence of nuclear disintegration. The hepatic cells are generally normal, or they may be fatty.

10. *Kidneys.*—The albuminuria which occurs in diphtheria is referable to many causes, of which the virus circulating in the blood is only one. Cardiac failure, respiratory difficulty, the febrile process, are adequate for the production of this symptom. The kidneys in cases where albuminuria has been present may be quite normal, or, on the other hand, they may exhibit varying degrees of parenchymatous inflammation. In nine out of twenty-one cases examined there was disseminated nephritis, with glomerulitis or hæmorrhage. For, besides the frequent occurrence of subcapsular hæmorrhage, there may be similar extravasation between and into the tubules as well as into the glomeruli. There is also considerable cell infiltration around vessels, and there leucocytes &c. can be seen to be in process of nuclear disintegration. Professor Oertel then details the lesions observed in each constituent part of the organ. First, as to the *glomeruli*, there may be thickening of Bowman's capsule, with proliferation and desquamation of its epithelium, and generally some albuminous exudation within the capsule. The glomerular capillaries show evidence of inflammation in the increase of their nuclei and endothelia, with dissolution and degeneration of the chromatin and nuclear juice. In fact, the capillaries are profoundly diseased, showing their subjection to the morbid action of the blood poison. The epithelium lining the *tubuli contorti* and *recti* is remarkably affected. Either the whole cell, which undergoes cloudy swelling, may be entirely disintegrated, and, becoming detached from the basement membrane, fill the tubules with necrotic products, or only the inner half of the cell mass disintegrates, the outer or basal half, which contains the nucleus, remaining *in situ*. In the former case granular casts are formed from the detached cell masses; in the latter the disintegrated portions of the cell mass eventually become hyaline masses that fuse into hyaline casts. This difference, doubtless, depends on the cells in the latter instance still retaining a connexion with the wall of the tubule. The *collecting tubes* may be dilated and bulged, being filled with finely granular albuminoid masses containing remains of nuclei and cells, or epithelia may be wholly detached. As to the *bloodvessels*,

inflammatory thickening of the adventitia and endothelial proliferation in the intima may be observed; but hyaline degeneration is rarely found. Reference to *bacteria* in the kidneys is postponed to a later section.

RABIES IN RICHMOND PARK.

A REPORT upon the recent outbreak of rabies among the deer in Richmond Park has been issued in the form of a Parliamentary paper, and contains some highly interesting observations upon this unusual, and indeed heretofore unrecognised, development of the disease. The results obtained are in every respect noteworthy, and the striking illustration which the inquiry has afforded of the indispensable importance of experimental methods in pathology is of more general interest still. It is impossible to evade the conclusion which Mr. G. P. Brown draws in his introductory notice of the reports prepared by Mr. Cope and Professor Horsley: "In any future outbreak the mere observation of the symptoms exhibited by the diseased animals will, in the light afforded by Professor Horsley's experiments, be sufficient to enable the observer to form a correct opinion as to the nature of the malady."

Upon the point of the susceptibility of animals of various species to inoculation with the virus by rabies, the following extracts from Mr. Cope's report merit notice: "In France, where the statistics of rabies are very carefully compiled, and where more cases of the disease are reported than in any other country in Europe, 1539 dogs, 39 cats, 99 cattle, 13 horses, 11 sheep, 9 swine, 1 mule, and 1 goat were returned affected in the twelve months ended July, 1887; no mention is, however, made of deer in this list, and from a letter which I have received from M. Cagny, secretary to the Central Veterinary Medical Society in Paris, it appears that there is no record of this disease having been recognised among deer in France. In Germany also the disease is very prevalent; 438 dogs, 5 horses, 92 cattle, 32 sheep, and 72 swine were reported affected in 1886; but here, again, no mention is made of rabies among deer."

The crucial test by which the character of the disease was demonstrated is thus described: "Although the inoculation of the rabbits resulted in their death from paralytic rabies, I suggested to Professor Horsley the desirability of inoculating a dog to see if true rabies could be produced in that animal. Accordingly, on May 26th, a dog was inoculated with part of the spinal cord of another affected deer which had been sent up from Richmond Park. Eleven days after the inoculation—i.e., June 6th, the dog presented symptoms of rabies, and died on June 12th; the necropsy was conducted by Professor Horsley, who found all the characteristic symptoms of rabies present."

The problem, How is the infection communicated? was also experimentally solved in the following manner: "As a means of testing whether the disease could be communicated by the bite, a rabid doe was placed in a shed with a healthy buck, which had been previously entirely isolated from the infected herds. Immediately the rabid doe was placed with the other animal she flew at it like a dog, and bit it about the ears and neck; the healthy deer was carefully watched, and on the morning of the nineteenth day it showed symptoms of disease, it became furious, and died in a very short time. This experiment conclusively proves that rabies can be conveyed by the bite of the rabid herbivora to another animal, and was a means of transmitting the infection in this outbreak; the absence of upper incisors in these animals must have rendered this method of inoculation very uncertain in its result, and no doubt accounts for the slow progress of the disease among the herd, a circumstance which throughout constituted the most peculiar feature in this outbreak."

The clinical report contributed by Professor Horsley contains a highly interesting contribution to the discussion as to whether a fœtus is liable to infection by a rabid mother: "The question whether the virus of an acute specific disease can pass through the placenta from the maternal to the fœtal circulation is yet so indeterminate and yet so important that any observation on that point, negative though it may be, is worth recording. On laying open the uterus of Deer No. 3, there was found a healthy fœtus about two feet long quite dead, but its decease evidently had only occurred on that of the mother. On dissection nothing was observable in the organs, but the spinal cord being removed, a small portion was crushed in bouillon, and inoculation practised therewith on two rabbits (Nos. 7 and 8) on June 2nd, 1887.—June 3rd, 1887: One rabbit (No. 7) unfortunately died of septicæmia on Nov. 26th, 1887. The other rabbit (No. 8) lived in perfect health till this day, when it was inoculated in series and succumbed with the usual symptoms. It will thus be seen that these experiments were negative in their results, but at least it is evident that rabbit No. 8 received no virus from the fœtal deer. The question of the transmission of the virus through the placenta can only be definitely decided when a large number of independent observations have been collected."

MOSAIC AND MODERN SANITARY ARRANGEMENTS.

As President of the Liverpool Medical Institution, Dr. Birkbeck Nevins recently delivered an inaugural address in which he compared the sanitary arrangements of the ancient Hebrew camp with those existing in several large modern British cities. With regard to the disposal of excreta, the lecturer recalled the stringent regulations of Moses, under which every man was to have a "paddle or a shovel among his weapons," with which he was to dig a hole at an appointed place, and to cover up the excreta before leaving the spot. It has been strongly insisted that nothing is so potent a disinfectant for such purposes in a hot climate as some six inches of dry porous earth; and it is worth noting that a high incentive of religious feeling was added to the sanitary obligation by the injunction: "For the Lord thy God walketh in the midst of thy camp; therefore shall it be holy, and no unclean thing shall be in it." The same injunction necessitated a proper disposal of the dead, and it is lamentable to think how far we are behind the Israelites in this matter. They buried their dead entirely outside the camp; whereas, as Dr. Nevins states, Liverpool disposes of from 14,000 to 15,000 dead bodies in the ground in that city every year, thus necessarily polluting soil and air. As to the use of disinfectants in connexion with the sacrificial processes, the lecturer pointed out that Moses was far in advance of us; for under the name of frankincense and other such titles, fragrant terebinthinate woods, and the volatile compounds of creasote and its allies, were largely used to deal with the animal exhalations arising in a hot climate from the processes under which large bodies of people were collected together for public worship. And, adverting to the scale on which these substances were employed, we are reminded that it passed into a saying that "the odour of the incense burnt in Jerusalem was never absent from Jericho," which was twenty miles distant.

Dealing next with the question of clean and unclean meats, we find that the general rule was that the class of ruminants of clean-feeding habits and wool-producing powers, but not other four-footed animals, might be eaten. The horse, it is true, although a clean-feeding animal, was not included, but this is regarded as being due to military considerations, which rendered it inexpedient to favour the multiplication of horses; besides which the army of the Israelites was essentially composed of infantry. The fact that swine were little better than scavengers of filth in those days naturally placed them in a different category to the animal that is nowadays very generally fed on nutritious meal diet and on sweet vegetables; and the prohibition as to mice is explained to have been essentially directed against the idolatrous practices of the Zabii. Much the same applies to the eating of blood, which is further an article especially liable to rapid decomposition. With regard to the enactment that in the case of a nest containing young ones or eggs, "Thou shalt not take the dam with the young," Dr. Nevins is inclined to think that what we term "a close season" was here in view, and that the regulation, covering as it did all classes of birds, had reference to food supplies as well as to the maintenance of the balance of nature.

The prevention of the spread of diseases is considered in connexion with leprosy, a term which is held to have had application beyond the one disease to which that name is generally applied. Thus, the arrangements for dealing with the "leprosy of a house or garment" are considered, and grounds are given for the belief that some of the conditions

which are described as calling for cleansing measures were very similar to "dry rot" and fungoid growths about dwellings, and had also in view what we should now call spores or micro-organisms in connexion with that which constituted the "leprosy" of ringworm, scarlatina, &c., affections in which the clothing was to be altogether destroyed.

And lastly, before applying the several principles embodied in the Mosaic laws to the circumstances of his own and other large cities, Dr. Nevins deals with the subject of purifications and ablutions. For men, the purifications amounted mainly to bathing of the body and washing of clothes under circumstances which gave to these processes a distinct sanitary value; and it is impossible not to regard the purifications and ablutions, whether for one or other sex, as having had, and as still having, an important bearing upon the healthiness of the Jewish race. Indeed, in connexion with the extraordinary care which is taken by this people as to purity of diet and as to bodily cleanliness, Dr. Nevins states that in all epidemics of cholera in Europe record of which he has been able to find, the Jews' quarters have been those where the fewest deaths from this disease have occurred. There is thus much in the history of this ancient people which affords proof of that which we at times regard as a modern contention—namely, that there is no more potent influence for good in securing the maintenance of health than a strict observance of cleanliness in every detail of life.

SUCCI, THE FASTING MAN.

THROUGH the courtesy of Professor Luciani, President of the Medico-Physical Academy of Florence, the medical world will, we understand, be supplied with whatever details may be asked for as to the nature and progress of the experiment now voluntarily undertaken by Signor Succi. The commissioners nominated by the Academy to observe and report upon the thirty days' fast are: 1. Dr. Baldi, who is entrusted with the analysis of the urine, including its daily quantity, density, and physical characteristics, with a quantitative determination of the dry residues and of the creatinine. Co-operating with him are Professor G. Roster and Dr. Pons, who determine quantitatively the degree of acidity, of the total azote, phosphorus, and chlorine; and Dr. Pellizzari, who makes a quantitative determination of the sulphur. In addition to these, analyses are made after incineration for estimating the potash and soda; while the fæces will also be chemically examined. 2. Professor Luciani himself undertakes the soluble ferments in the saliva, vomit, and urine. 3. The same physiologist will also report upon the gaseous exchange through the lungs; on the respiration by a special apparatus, which will be in working for thirty minutes every two days, and with a pneumographic record concurrently; while Dr. Baldi will analyse the air expired, volumetrically, on Bunsen's method. 4. Dr. Bianchi undertakes the anthropometrical examination and that of the visceral areas, the sphygmography, the cardiography, and the vital capacity. 5. Professor Luciani reports on the daily weight, the sphygmomanometry (*sfigmomanometria*) of the radial artery on Basch's method, the dynamometry, and the curve of muscular fatigue with Morselli's dynamograph. 6. Dr. F. Colzi is responsible for the examination of the blood and the globulimetry on Hayem's method; while to Professor Luciani is committed the hæmometry on the system of Fleischl. 7. The microscopic and bacteriological examinations of the urine, of the vomit, and of the fæces are entrusted to Dr. Banti, who also investigates the toxicity (*tossicità*) of the urine and of the expired air. 8. Assisted by Dr. Silvestri, Professor Luciani reports on the senses and the vaso-motor reflexes; while Dr. Turchini takes in hand the electric examination of the muscular system. 9. The biographic investigation and psychic examination (*ricerche biografiche ed esame psichico*) fall to Dr. A. Filippi. 10. The report on the axillary temperature, on the number of the pulsations, and on the respirations morning and evening is being compiled by the medical students, who relieve each other as watchers. 11 (and lastly). The curve of the daily oscillations of temperature for twenty-four hours before the fast and for twenty-four hours during the fast has been undertaken by Messrs. Burresi, Pieraccini, and Favilli, students of medicine of the sixth course of study. Professor Luciani warns the profession and the scientific world against the bulletins generally compiled by laymen, and in every case unauthorised, which are published from time to time. The official report will be issued with the least possible delay, and any detail on which information is asked will be immediately supplied (Dr. Luciani repeats) on application to him.

VITAL STATISTICS.

HEALTH OF ENGLISH TOWNS.

IN twenty-eight of the largest English towns 5838 births and 4193 deaths were registered during the week ending March 10th. The annual rate of mortality in these towns, which had been 20·9, 21·6, and 21·5 per 1000 in the preceding three weeks, rose last week to 23·3. During the first ten weeks of the current quarter the death-rate in these towns averaged 22·5 per 1000, and was 1·6 below the mean rate in the corresponding periods of the ten years 1878-87. The lowest rates in these towns last week were 15·0 in Halifax, 15·2 in Derby, 16·5 in Brighton, and 17·4 in Sunderland. The rates ranged upwards in the other towns to 28·4 in Cardiff, 29·5 in Norwich, 30·7 in Blackburn, and 31·3 in Manchester. The deaths referred to the principal zymotic diseases, which had been 429 and 366 in the previous two weeks, rose last week to 442; they included 165 from whooping-cough, 59 from scarlet fever, 49 from measles, 45 from diphtheria, 43 from diarrhœa, 42 from "fever" (principally enteric), and 39 from small-pox. No death from any of these zymotic diseases was registered last week in Newcastle-upon-Tyne or Preston, whereas they caused the highest death-rates in Oldham, Sheffield, and Plymouth. The greatest mortality from whooping-cough occurred in London, Salford, Leicester, Wolverhampton, and Norwich; from scarlet fever in Oldham and Blackburn; from measles in Bradford and Plymouth; and from "fever" in Leicester, Norwich, and Derby. The 45 deaths from diphtheria in the twenty-eight towns included 24 in London, 3 in Manchester, 3 in Birmingham, 2 in Leicester, 2 in Liverpool, 2 in Bradford, and 2 in Leeds. Small-pox caused 29 deaths in Sheffield, 3 in Oldham, 2 in Manchester, 2 in Blackburn, 2 in London, and 1 in Nottingham, but not one in any of the twenty-two other large provincial towns. The Metropolitan Asylum Hospital Ships contained 14 small-pox patients on Saturday last, showing a further slight increase upon the low numbers in recent weeks; the Highgate Small-pox Hospital contained 1 patient on Saturday night. The number of scarlet fever patients in the Metropolitan Asylum Hospitals and in the London Fever Hospital was 1280 at the end of last week, against numbers declining steadily in the preceding fourteen weeks from 2764 to 1363; the 125 cases admitted to these hospitals during the week showed, however, an increase upon the declining numbers in recent weeks. The causes of 92, or 2·2 per cent., of the deaths in the twenty-eight towns last week were not certified either by a registered medical practitioner or by a coroner. All the causes of death were duly certified in Leeds, Nottingham, Brighton, and Bolton; the largest proportions of uncertified deaths were registered in Sheffield, Hull, Blackburn, and Salford.

HEALTH OF SCOTCH TOWNS.

The annual rate of mortality in the eight Scotch towns, which had been 22·6 and 23·4 per 1000 in the preceding two weeks, further rose to 24·2 in the week ending March 10th; this rate exceeded by 0·9 the mean rate during the same week in the twenty-eight large English towns. The rates in the Scotch towns ranged from 12·2 in Greenock and 18·2 in Leith, to 29·4 in Glasgow and 40·5 in Paisley. The 611 deaths in the eight towns showed a further increase of 19 upon the numbers returned in the preceding three weeks, and included 29 which were referred to whooping-cough, 14 to measles, 11 to diphtheria, 10 to "fever," 7 to diarrhœa, 5 to scarlet fever, and not one to small-pox; in all, 76 deaths resulted from these principal zymotic diseases, against 61 and 66 in the preceding two weeks. These 76 deaths were equal to an annual rate of 3·0 per 1000, which exceeded by 0·5 the mean rate last week from the same diseases in the twenty-eight English towns. The fatal cases of whooping-cough, which had been 32 and 28 in the preceding two weeks, were last week 29, of which 14 occurred in Glasgow, 5 in Edinburgh, 5 in Aberdeen, and 3 in Paisley. The 14 deaths from measles corresponded with

the number in the previous week, and included 6 in Edinburgh, 5 in Glasgow, and 2 in Leith. The deaths from diphtheria further rose from 7 and 9 in the previous two weeks to 11, of which 5 occurred in Glasgow, 2 in Leith, and 2 in Paisley. The 10 deaths referred to "fever," of which 7 occurred in Glasgow, showed a marked increase upon the low numbers in recent weeks. Three of the 5 fatal cases of scarlet fever and 3 of the 7 deaths from diarrhœa were returned in Glasgow. The deaths referred to acute diseases of the respiratory organs in the eight towns, which had been 135 and 153 in the preceding two weeks, further rose last week to 159, and exceeded the number returned in the corresponding week of last year by 24. The causes of 71, or nearly 12 per cent., of the deaths registered in the eight towns during the week were not certified.

HEALTH OF DUBLIN.

The rate of mortality in Dublin, which had been 25·9, 28·4, and 34·0 per 1000 in the preceding three weeks, declined again to 33·1 in the week ending March 10th. During the first two weeks of the current quarter the death-rate in the city averaged 32·1 per 1000, the mean rate during the same period being 22·6 in London and in Edinburgh. The 224 deaths in Dublin showed a decline of 6 from the number in the previous week; they included 7 which were referred to whooping-cough, 5 to scarlet fever, 4 to measles, 4 to diarrhœa, 3 to "fever," 2 to diphtheria, and not one to small-pox. Thus the deaths from these principal zymotic diseases, which had been 17 and 25 in the preceding two weeks, were again 25 last week; they were equal to an annual rate of 3·7 per 1000, the rate from the same diseases being 2·5 in London and 2·6 in Edinburgh. The fatal cases of whooping-cough, which had been 4 and 6 in the previous two weeks, further rose last week to 7; while the deaths from "fever" showed a decline of 2, and those from diarrhœa an increase of 2, compared with the numbers in the previous week. The deaths both of infants and of elderly persons showed an increase upon the numbers returned in the previous week. Four inquest cases and 5 deaths from violence were registered; and 62, or more than a quarter, of the deaths occurred in public institutions. The causes of 30, or nearly 14 per cent., of the deaths in the city were not certified.

HEALTH CONDITION OF FRENCH TOWNS.

The recent issue of the December number of the *Statistique Sanitaire des Villes de France* affords the means for summarising the facts for the twelve months of last year, and for calculating the mortality statistics for the fifty-one French towns which had at the time of the last census in May, 1886, a population exceeding 30,000 persons. The return in question is a valuable source of statistics, but it has deficiencies which detract somewhat from its value as a means of educating public opinion in France in the direction of sanitary progress, which the figures about to be referred to show to be of such urgent necessity. The return gives no calculated rates to population, and the bare figures without relation to population are useless for comparative purposes, or as a test of sanitary condition; moreover, no figures are given for the aggregate of the fifty-one towns. On account of these defects, the calculated rates for the entire year involved much labour, which should be as far as possible obviated, if statistical returns are intended to serve a useful purpose. It should be stated, moreover, that the calculated rates for 1887, to be hereinafter quoted, are based on the census numbers for 1886; but this need not seriously detract from their value for comparative purposes, as the rate of increase of population in French towns is not, generally speaking, very great. The aggregate population of the fifty-one French towns dealt with in this return was rather more than six millions and a quarter, among which population the birth-rate in 1887 was 25·9 and the death-rate 25·3 per 1000. The excess of births over deaths in these towns during the year was only 3348, whereas at the rate which prevailed in the English towns it would have exceeded 70,000. The birth-rate was 6·9 per 1000 below the rate in the English towns; it exceeded 29 per 1000 in very few towns, among which may be mentioned Marseilles 29·5, Lille 32·4, Havre 32·5, and Roubaix 37·3. In a large number of towns not only was the birth-rate exceptionally low, but it was exceeded by the death-rate; among the larger of these may be mentioned Lyons 21·0, Bordeaux 22·4, Toulouse 19·3, and Nantes 21·5. With regard to the mean death-rate in the fifty-one towns, we have stated that it was 25·3 in 1887; this rate exceeded the mean rate in the twenty-eight large English towns by 4·5 per 1000, and implied the deaths of more than 28,000 persons in the French towns, who would have survived if the death-rate had not exceeded that which prevailed in the English towns. In the ten largest towns, having populations exceeding 100,000, and including Paris, the mean death-rate was 24·7; in ten towns with populations ranging from 65,000 to 100,000 the mean rate was 27·1; in ten towns having populations between 50,000 and 65,000 the rate was 25·3; in ten towns having populations between 40,000 and 50,000 the rate was 26·8; and in the eleven smallest towns in the list with populations ranging between 30,000 and 40,000 the rate was also 26·8. It appears therefore that, generally speaking, the largest excess of death-rate, and by fair inference the greatest sanitary deficiencies, exist in the smaller of the French towns. Among the eleven largest French towns, each having a population exceeding 100,000, the death-rates last year ranged in order from the lowest, were Lyons 22·2, Roubaix 22·6, Paris 23·4, St. Etienne, 24·8, Bordeaux 24·9, Lille and Nantes each 25·1, Toulouse 26·5, Marseilles 29·2, Havre 32·1, and Rouen 33·7. Bearing in mind the still higher mean death-rates in some of the groups of smaller towns above noted, it is certain that even the high rates in Havre and Rouen (due in great measure to exceptionally severe epidemics of typhoid fever) were much exceeded in many of the towns with populations ranging between 30,000 and 100,000. The return which supplied the facts from which the above-mentioned rates were calculated also contains much valuable information concerning the ages at death and the causes of death in these French towns, to which we may on occasion refer.

Correspondence.

"Audi alteram partem."

THE PRESIDENCY OF THE ROYAL COLLEGE OF PHYSICIANS.

To the Editors of THE LANCET.

SIRS,—In the last number of your journal you informed your readers, in a leading article, what you considered were my claims and qualifications for the honourable and distinguished position of President of the Royal College of Physicians. I ought, perhaps, to feel grateful for the very flattering terms in which those so-called claims were put forward; but, when it is remembered that, by the regulations of the College, the choice of a President is to be made "*without any formal proposal or nomination*," I cannot but think that more respect would have been shown to the College, and more consideration for myself, if all reference to the subject had been avoided. You further state "there are many Fellows, doubtless, who would wish to know if I would consent to serve the office (of President) for the ensuing year." Permit me, therefore, to request that you will be so good as to inform them that I should positively but most respectfully decline to accept the office. I am deeply sensible of the kind feelings which have been manifested towards me by the Fellows of the College on many occasions, and I am aware that it must seem ungracious, and certainly premature, to decline an office to which I have not been elected; but the false position in which I have been placed has rendered such a declaration on my part necessary.

Let me add that my resolution is the result of mature deliberation, and of a firm conviction that the office of President should be filled by someone who is not so far advanced in years as—Your obedient servant,

March 12th, 1888. HENRY A. PITMAN.

EARLY WRITINGS ON BOVINE TUBERCLE.

To the Editors of THE LANCET.

SIRS,—The letters addressed to you recently by veterinarians, in order to show how much their profession has done in the study of one of its own subjects—namely, bovine tubercle—have suggested to me to send you a brief account of the earliest publication on the communicability

of that disease to man. This work, which is now before me, is an essay of ninety pages by Professor Kiencke, M.D., published at Leipsic in 1846, under the title of "Ueber die Ansteckung und Verbreitung der Scrophelkrankheit bei Menschen durch den Genuss der Kuhmilch." He traces a connexion between the "scrofulous disease" which developed in a number of children and the milk with which they had been, and continued to be, supplied from certain known cows. One of the sixteen children died; the others improved greatly in health when the suspected milk was stopped in each case. Of the seven cows implicated in this undesigned experiment, three were followed to the slaughter-house, and were found to be tuberculous in various organs and parts; a fourth, which was killed and dissected carefully under Professor Kiencke's direction, was also found full of tubercle; in a fifth the nodular masses could be felt during life through the skin of the abdomen; the remaining two were young and healthy, and are introduced for contrast. The most general symptom was a state of passive congestion in the bloodvessels of various regions.

With reference to the children, it was somehow possible to ascertain which particular cow had supplied the milk for each of them; so that five of the seven cows and the sixteen children are brought into relation. The symptoms which arose in the children after they began to be fed with the cow's milk were those of scrofula (glandular swellings &c.), and sometimes of rickets. Professor Kiencke endeavours to establish the link of cause and effect by a strict handling of facts precisely ascertained. Even if the ailments of the children were not in every case scrofulous, there was reason to think that the cow's milk had caused them. Besides the cases (in cows and children), the essay contains many sensible remarks on the artificial feeding and forced milking of cows, especially in town dairies, as well as a number of chemical and physiological observations on the abnormal nutrition and milk-secretion of animals so situated.

In my book on "Bovine Tuberculosis in Man" (1881) I claimed that the twelve cases there given were the first of the kind recorded as such, and, in so far as post-mortem verification is essential, I believe they really were the first. But from what I have said above it will be seen that Professor Kiencke had endeavoured to establish the link of connexion in another way as early as 1846. Between that date and 1869, when Gerlach of Hanover took it up, the subject would seem to have dropped. Gerlach was the first to show that bovine tubercle could be communicated experimentally by inoculation of the morbid products, or by feeding with the milk. He was not satisfied with having set up a tuberculous disease generally; he insisted upon the distinctive characters of bovine tubercle, and upon the morphological identity between these characteristic products of disease in the cow and the formations of the serous membranes and viscera in the animals experimented upon. He thus combined morphological and experimental evidence. Kiencke's work illustrated the third, and perhaps the most ambiguous, kind of evidence—namely, the tracing of disease from a particular cow to a particular child. It is not likely that the doctrine of communicability to man will be generally accepted by the public, or even by the profession, until the evidence procured on these several lines of research, together with the obvious facts of malnutrition in cows closely confined and over-milked, is worked up into the synthetic form which proof must always take if it is to become an effective and familiar conviction. Doubtless the Congress on Tubercle and other Diseases of Domestic Animals which is to be held at Paris in the ensuing summer, under the presidency of M. Chauveau, will help to give currency to that inevitable belief.

In reading the history one finds such suggestive coincidences as the following: In 1817, Dupuy, a Paris veterinarian, described the peculiar pendulous tubercular masses on the serous membranes of the cow, and traced them to a "hydatid" origin. Two years after, Dr. Baron, of Gloucester, who is best known as the biographer of Edward Jenner, published a memoir on a series of cases of serous membrane tuberculosis in man, for which he also asserted a "hydatid" origin, having arrived at that conclusion from their peculiar pendulous form, just as Dupuy had done for bovine tubercle itself. At that time there was no suspicion of any connexion of cause and effect between the tubercular disease of the cow and any variety of tubercle in man.

I am, Sirs, your obedient servant,

March 5th, 1888. C. CREIGHTON.

SCARLATINA AND THE COW.

To the Editors of THE LANCET.

SIRS,—At the fortnightly meeting of the Medical Society of Cannes held on March 3rd, an interesting communication was made regarding the connexion between scarlatina and an eruptive disease observed on the udders of certain cows located in one of the dairies of the place.

In December last a committee was appointed by the Medical Society to investigate and report upon the subject of the milk supply of Cannes—i.e., the condition of the dairies, the health of the cows, the storage of milk, &c. During their investigations the committee came upon a dairy where all the cows were suffering from a diseased condition of the udders. They saw no ulceration, but the teats were covered with large scabs, and the proprietor of the dairy stated that the scabs had been preceded by a vesiculo-pustular eruption, which broke whilst milking, moistening the hands of the milkers. In one case only did the committee see an unbroken pustule. At the time these investigations were being carried on (January, 1888) a few cases of scarlatina had shown themselves among the visitors at one of the hotels and in a villa situated close by, and the committee ascertained that these individuals had partaken of milk supplied from these diseased cows. In one family four persons used this milk; two who took it after boiling escaped, whilst the other two members of the same family who used it unboiled contracted the disease. The hotel in which these cases occurred was supplied at the time with milk from another dairy, and no cases of scarlatina showed themselves either then or afterwards among the numerous visitors and servants. Only those who had purchased on their own account milk from the diseased cows contracted the disease. All the cases of scarlatina were at once removed from the hotel and strictly isolated. The disease did not spread in any way either among the visitors or the inhabitants of Cannes. The outbreak was entirely local and limited, as far as could be ascertained, to those who used the contaminated milk; at least, if other cases occurred, they must have been very few, as at the meeting of the Medical Society held to-day none of the many practitioners there present were aware of the existence of other cases. There was no scarlatina among the dairy people either then or previously; no sores formed on the hands of the milkers, who continued to enjoy good health. Cannes, I regret to say, possesses no health officer, and the inquiries having been made by very able, but just then busily engaged, private practitioners, they could not be carried on further. Yet, incomplete as the cases may be, it is either a strange coincidence or another instance illustrating the power of certain eruptive diseases situated on the cow's udder to provoke scarlatina in man.

I remain, Sirs, yours truly,

Cannes, March 3rd, 1888. H. BLANC, M.D., F.R.C.P.

IMMEDIATE REDUCTION AFTER TENOTOMY.

To the Editors of THE LANCET.

SIRS,—In answer to Mr. Parker's letter in THE LANCET of March 10th, I wish to say that a considerable time is necessary to estimate the exact value of such a procedure as *immediate reduction after tenotomy*. Every cautious surgeon who ventures to depart from the methods which he has been taught to consider correct will, I should think, abstain from advocating such departure until he is able to do so with certainty as to the results. When I published the "Surgery of Deformities" in 1882, I had only operated in this manner on a very few cases, and in these cases the contractions were very limited. Although, as time went on, these operations emboldened me to adopt the same course in the more severe deformities, I did not at the time of publication feel justified in advising other than the plan laid down in works upon orthopædic surgery, and taught by the majority of orthopædic surgeons.

Mr. Parker remarks that "he cannot accept immediate reduction as possible on anatomical grounds, &c., unless" (if I understand him correctly) "multiple tenotomy and syndesmotomy precede it." Mr. Parker apparently means that when many tendons and other structures are involved, as in severe cases of talipes varus, it may be impracticable to restore the foot at once to a correct position. Of course

this is so; but Mr. Parker ought to know that what is meant by "immediate reduction" is reduction *as complete as possible* at the time of operation in contradistinction to the old method of allowing the foot to remain in the deformed, or in nearly the deformed, position for some days, and then applying gradual extension. While such partial "immediate reduction" is all that can be attained in many cases, I cannot admit that it is so always; for in other instances, as in most cases of talipes equinus, the foot may be placed at once in a normal position. Mr. Parker seems, however, to ignore the possibility of deformity depending upon the contraction of one tendon alone. I cannot quite understand the object of his letter; it is evidently written without much care, as he has not quoted my book correctly. If he had read the context of the first quotation which he makes, he would have seen that the procedure recommended was in reference to treatment by "assiduous bandaging to a splint without tenotomy," and not treatment after operation. The second quotation, however, rightly applies to the subject; but I have explained above (an explanation which can hardly be necessary to the majority of your readers) why I did not advocate the plan of "immediate reduction" when I published my book, "The Surgery of Deformities."

I am, Sirs, yours truly,

Queen Anne-street, W., March 12th, 1888. NOBLE SMITH.

METROPOLITAN PROVIDENT DISPENSARIES.

To the Editors of THE LANCET.

SIRS,—The following resolutions have been agreed to by a committee of medical men appointed to consider the objections to be taken to the scheme of the above Association, and I have been instructed to invite the attention of members of the profession to the subject, and to obtain the signatures of such as are disposed to acquiesce in the views expressed, or to offer suggestions in the matter:—

"Resolved that—1. The resolutions adopted at a public meeting held at the Society of Arts in December, 1887, cannot be accepted as embodying the opinion of the medical profession. 2. That objections to the scheme of the Metropolitan Provident Medical Association are based on the following grounds: (*a*) Provision for medical attendance on those unable to pay the fees required in ordinary practice is already amply provided for by existing charitable institutions or by the individual or collective efforts of general practitioners. (*b*) Measures hitherto taken by the lay public to establish so-called Provident Medical Institutions have invariably resulted in introducing a system of unhealthy competition, detrimental alike to the best interests of the profession and subversive of its influence with the general public. (*c*) The wholesale distribution of handbills by the organisers of any scheme of medical relief is to be condemned as much as similar action on the part of individual members of the profession. 3. The committee would further suggest that, in order to carry out the principles embodied in these resolutions, it is desirable, in order to preserve the rights of general practitioners, that an organisation be formed for that purpose."

It will be observed that it is proposed to form a definite organisation to oppose this scheme, and the following members of the committee or myself will be glad to receive the names of all members of the profession who are willing to co-operate: Dr. Cohen, 195, Sutherland-avenue, Maida-vale, W.; Dr. Maunsell, St. Mark's House, Bolingbroke-road, S.W.; Dr. Paramore, 2, Gordon-square, W.C.; Mr. Kisch, Abingdon House, Sutherland-avenue, Maida-vale, W.; Dr. Sargent, High-street, Shadwell; Mr. Wainwright, 230, Brunswick-road, Poplar; Mr. Simson (treasurer), 110, Lavender-hill, S.W.

I remain, Sirs, yours faithfully,

F. H. CORBYN, Hon. Sec.

18, Abercorn-place, St. John's Wood, March, 1888.

P.S.—The resolution passed at the Society of Arts was in favour of establishing Metropolitan Provident Dispensaries all over London.

THE annual meeting of the governors of the Royal London Ophthalmic Hospital was held on the 13th inst., when satisfactory general, financial, and medical reports were presented and adopted.

MANCHESTER.

(*From our own Correspondent.*)

FEVER HOSPITALS.

THE opposition which was made on various grounds to the building of a new fever hospital by the Salford Corporaon the Eccles New-road appears to have been overcome. The Local Government Board have refused to interfere in the matter on the ground of having no legal *locus standi*, and an exhaustive report on the whole question has been published by the officer of health to the borough, in which he deals *seriatim* with the several specific objections raised. He asserts that no harm has been shown to arise from the proximity of a fever hospital to dwelling-houses, and quotes from the experience of other hospitals situated in populous districts. But in none of these is small-pox treated, a disease which the Salford authorities may find themselves at any time called upon to make provision for, the arrangements now existing for the treatment of these cases in the hospital belonging to the Royal Infirmary being only of a temporary character, and liable at any time to be terminated by the latter body. Another objection, the proximity of the proposed site to the borough sewage works, he considers in some respects an advantage, as affording facilities for the immediate and separate treatment of the hospital sewage, without its passing at all into the public sewers. From information obtained from some towns where similar works are in operation, he states that no harm could arise to the patients, and that any nuisance that may possibly arise is directly controllable by the Corporation itself. This evidence, however, hardly agrees with that given by Dr. Carpenter, and quoted in "Wilson's Hygiene," as to outbreaks of diarrhœa at Christ Church Workhouse caused by emanations given off from sewage works at Spitalfields. Without in the least degree depreciating Dr. Tatham's able report, it would no doubt have given more satisfaction, especially to the opponents of the site, had some independent opinion been obtained from an expert or sanitarian having special knowledge of the subject. Some attention has recently been directed to the question of fever hospital accommodation in our own city. As many of your readers know, Manchester as a corporation has no hospital of its own, but contracts with the Royal Infirmary to treat its cases of infectious disease. Serious allegations have lately been made in the public press that patients suffering from typhoid cannot obtain admission to hospital without payment, and as a consequence the very class who most need careful treatment and skilled nursing throughout a dangerous and tedious illness are left at their own homes, too often overcrowded, with diminished chances of recovery, and to be a possible source of danger to others. That this should be so reflects no credit upon either our largest and wealthiest medical charity or the health authorities of our city, and it is probable that something more may yet be heard of this subject.

OWENS COLLEGE.

The Court of Governors, at their last meeting, re-elected the Duke of Devonshire as president of the College for the ensuing five years. In 1883 the Court made certain regulations for the admission of women as students of the College, experimentally, for a term of five years. That period having now elapsed, and the experiment having proved satisfactory and successful, permanent arrangements have been made for continuing the same on a more liberal basis even than heretofore. At the same meeting it was stated that the extensive building operations of the last few years, by which class rooms and laboratories for zoology, botany, geology, and mineralogy, &c., had been provided, had rendered it incumbent to raise additional funds, and an urgent appeal is put forth for £45,000 to free them of present debt.

SMALL-POX.

Cases of small-pox continue to arise, but as yet not to an extent to cause any alarm, though, owing to the epidemic at Sheffield, much more is heard about them than would otherwise be the case. Since the beginning of the year there have been nearly 100 cases in Manchester and Salford, and about a dozen more in the surrounding townships. It is reassuring to know that our health authorities are fully alive to their responsibilities in regard to this disease.

The Manchester and Salford Sanitary Association are also issuing a tract for popular instruction on the symptoms &c. of infectious diseases.

HOSPITAL SUNDAY AND SATURDAY.

Hospital Sunday, which was held in the middle of February, was unfortunately most unfavourable so far as weather conditions are concerned, and it was feared that there would be a serious falling off in the amounts collected. On the Saturday following the usual collections were made in workshops &c., and the total receipts as published up to Saturday last amount to £7340, a slight increase over last year's collections.

CREMATION.

Our present Bishop has lately given expression to views upon the question of cremation fully as liberal as those of his revered predecessor. In consecrating a new cemetery at Blackpool, he said: "Interment was just as much a Pagan mode of disposal of the dead as cremation was. In the early days of Greece and Rome the common method of disposal of the dead was by interment, and cremation was not known until the later days of the Republic..... Nor did he believe there was anything in St. Paul's doctrine of the Resurrection which bore upon this subject. If there was, he thought, it indicated to them that of the two modes proposed cremation was the more Christian. They had certainly no basis to encourage the degrading superstition that every particle of matter that was buried in the grave would be raised again..... In this discussion the question of Christian doctrine ought not to enter. The public health and public convenience ought to determine between the two methods of disposing of the dead."

A complimentary dinner is to be given at the Queen's Hotel on Thursday next to Dr. Cullingworth, on the occasion of his leaving Manchester for London. This mark of appreciation has been arranged by the Medical Society, and a testimonial will also be made to him. The chair will be taken by Dr. Dreschfeld.

March 12th.

LIVERPOOL.

(From our own Correspondent.)

HEALTH OF WEST DERBY.

THE district under the supervision of the medical officer of health for West Derby (Dr. William Clarke) comprises a considerable portion of the borough of Liverpool as well as its adjoining suburbs. His recently published report for 1887 is of great interest and importance. He states that the greatest mortality was caused by measles, scarlatina, diphtheria, and whooping-cough, the numbers being 44, 20, 10, and 10 respectively. Measles was more fatal than in the previous year, scarlatina practically the same, diphtheria less, and whooping-cough much less. Four deaths occurred from typhoid fever, 5 from croup, and 5 from puerperal fever. Diarrhœa prevailed during August and September, but to a much less extent than in 1886, the deaths in the two years being 42 and 24 respectively, this latter number being higher than the average. The mortality from all zymotic diseases was 128, a higher number than has been reached for years. Special mention is also made in this report of cancer, no fewer than 27 cases of death from that disease, of one or other organs, having been returned for 1887, against 9 in 1886. Phthisis and allied diseases were somewhat less fatal; inflammatory disease of the lungs much more so than in 1886. Great stress is laid upon the importance, as shown by the previous figures, of having proper hospital accommodation for infectious diseases in the district. For a long time West Derby has been absolutely without any means for the isolation of fever and other infectious cases, and the consequence has been a spread of fever, which might have been checked by timely removal. Thus a case of typhus fever was reported as having occurred in a certain house, but as there was no hospital to which the patient could be removed, every member of the family, five in number, was attacked. It had been contracted in the first instance from the next house. From there as a centre a number of cases occurred, some in distant parts of the district, but all clearly traceable to personal infection conveyed from one house to another. Dr. Spear, from the Local Government Board, visited the district, saw the houses at the time of the outbreak, and urged upon the Board the great necessity there was for hospital accommodation. Certificates are frequently received from district medical officers that certain patients are suffering from infectious diseases and ought to be isolated, but the only answer is that there is no place of isolation in the district. There would appear to be a sort of border line at the city boundary, where neither the municipal nor county authority is very stringently asserted. Speaking of the inhabitants, the medical officer says: "Many of the occupiers of the houses in these streets are of the roughest class, rendering it hardly safe for the inspector of nuisances to go alone to inspect the houses, and it is almost impossible for the landlords of the houses to keep them in repair or fit for habitation." There are other matters of interest in this report which cannot be embodied in this notice.

THE ROYAL SOUTHERN HOSPITAL.

At a meeting of the trustees of the Royal Southern Hospital, Liverpool, which has been held recently, Mr. William Alexander, M.D. Queen's Univ. Irel., M.Ch., and F.R.C.S. Eng., was elected surgeon in place of Mr. Robert Hamilton, who has resigned. The election was made without any opposition, and the appointment is a subject of congratulation to all concerned in the welfare of the hospital. In addition to being a Gold Medalist and Exhibitioner of his University, Dr. Alexander is well known in the surgical world as the author of the Jacksonian Prize Essay on "The Pathology and Surgical Treatment of Diseases of the Hip Joint," and of the Sir Astley Cooper Prize Essay on "The Pathology and Pathological Relation of Chronic Rheumatic Arthritis."

APPOINTMENT OF POLICE SURGEONS.

For nearly thirty years there have been four surgeons appointed to attend to the members of the city police force, the duties of two of them being to attend to such as may have been hurt while in the execution of their duty, to examine in rotation the recruits, and to certify as to their unfitness for further police duty of such members as may apply for superannuation. The other two surgeons attend to the sick members of the force in their respective divisions. There have been three vacancies lately in these appointments. One was caused by the death of Mr. Edward Parker, in December last, surgeon to the north division, his duties having been performed up to the 18th inst. by Mr. F. W. Lowndes, surgeon to the south division. Dr. John Stephen Clarke, who for upwards of sixteen years has been the sick surgeon for the north division, has been promoted to the vacancy caused by Mr. Parker's death. Dr. Alex. McPherson and Mr. Rhinallt N. Pughe have been elected sick surgeons respectively to the north and south divisions.

March 12th.

NORTHERN COUNTIES NOTES.

(From our own Correspondent.)

NEWCASTLE ROYAL INFIRMARY.

THE Finance Committee of the Corporation has sent in a report recommending that the annual subscription to the infirmary be increased to 300 guineas. The committee stated that in 1836, when the population of the town was between 50,000 and 60,000, the subscription of the Corporation was £168, and, considering that the population of the city was now nearly 160,000, and that the Corporation, as owners of property and large employers of labour, derived much benefit from the institution, the committee recommended the increase.

ST. JOHN AMBULANCE ASSOCIATION.

A deputation of medical men in the city waited last week on the Corporation of Newcastle to ask its aid and support to enable the Association to establish a branch in Newcastle and neighbourhood. Dr. Embleton was the principal speaker, and he urged very forcibly the claims of the Association. The Mayor, in reply, said the Council would give the matter every consideration.

DURHAM.

A case of interest to the profession was tried on Saturday last at the Durham Assizes. A miner brought an action

for damages laid at £300 against a surgeon practising at Bishop Auckland, county Durham, for alleged injury sustained by his wife in her confinement through the negligence of the surgeon's unqualified assistant. On the other hand, it was contended that the injuries might have followed the greatest care, and after hearing the evidence of Dr. Oliver of Newcastle, the jury said they were satisfied, and the case broke down.

SUNDERLAND.

A curious case of fraud has been brought to light by one of the union surgeons at Sunderland. A man aged eighty-four had been receiving out-door relief for himself and wife at the rate of 5*s.* per week, and in this way drew from the guardians over £40. A few days ago it was discovered that he had £100 in the bank. This was found out by his asking the surgeon to certify that he was unable to draw.—A number of members of the police force at Sunderland are students of the ambulance work under the police surgeon, Mr. J. C. Wood. On some late occasions the police have shown a practical knowledge of the work by attending to persons who have been injured in the streets.—Sunderland is again at the bottom of the death-rate of the twenty-eight large towns of England, the rate being only 13·4 per 1000. This is the second time in a few weeks that the town has been in the same condition.—The prisoners in what is known as the Sunderland poisoning case, who were found guilty of conspiring to kill and murder a barman named Foxall, when tried before the Lord Chief Justice at the former assizes, came up for sentence at the present Spring Assizes at Durham before Mr. Justice Day. Both prisoners were females; the elder was a fortune-teller, and the younger the separated wife of Foxall. It was shown at the trial that the wife consulted the fortune-teller, and in consequence of her advice poison was administered to the man, from which he suffered severely. The defence was that the poison was given to the man as a love potion, or for getting him more attached to his wife. The man's life was insured, and altogether the jury had little difficulty in finding them guilty. The fortune-teller has been sentenced to seven years' and the wife to five years' penal servitude.

CUMBERLAND.

There has been a further extension of small-pox in Carlisle. The young woman who came from Manchester with the disease appears to have infected two other sisters and a brother; all of these have been reported to the medical officer of health, and have been removed to the hospital.—I regret to announce the death, under rather painful circumstances, of Mr. Joseph MacNab, surgeon, of Whitehaven. On Wednesday last he was going about as usual, when he was seized with angina pectoris while out walking. He reached home, however, and appeared better. Going upstairs to bed, he was about to retire, when he was seized with another spasm, and expired in a few minutes. Mr. MacNab had been resident in Whitehaven as surgeon for about twelve years; he was a native of Ireland, thirty-four years of age, and he leaves a widow and one child.

Newcastle-on-Tyne, March 14th.

ABERDEEN.

(From our own Correspondent.)

HOSPITAL FOR SICK CHILDREN.

THE annual meeting of the subscribers to the Aberdeen Hospital for Sick Children was held yesterday. The report submitted to the meeting shows that during the past year 424 patients—an increase of 69 on the numbers for 1886—had been treated in the wards of the hospital. Of these 424 cases, 241 were cured, 63 improved, 28 removed at desire or unfit, and 24 died; while on the 31st of December there were 68 remaining in the hospital. The average daily number of patients in the wards had been 57, as against 53 in 1886. Thirty-seven patients had been received into the scarlet fever ward, and 11 into the ward for measles. In the out-patient department 925 cases were treated, and 24 dental operations had been performed, making in all a total of 1373 children who had received the benefits of the institution. In moving the adoption of the report, Sheriff Wilson, who presided at the meeting, pointed out that the hospital began with 12 beds, and now holds 80 beds—60 for medical and surgical cases, and 20 for cases of infectious diseases. He wished, he said, specially to allude to two features of the institution—viz., the continued use made of the infectious wards and the convalescent cottages in connexion with the hospital. The hospital is fortunate in having three cottages in the country to which convalescent patients may be sent, and during 1887 no fewer than fifty-six children were sent to these cottages, so that they might thoroughly recover health and strength before they were put back into their old surroundings. The expenses incurred in the maintenance of these cottages are defrayed by several ladies who interest themselves in the work. Unfortunately, the financial part of the report is far from satisfactory. The expenditure for the year—£1400 9*s.* 9*d.*—exceeded the income by £450 18*s.* 9*d.*, which, with a deficit for the preceding year, leaves a debt on revenue account of £629 7*s.* 1*d.* Eleven cots are maintained by private individuals, the cost in each case being £23 per annum. Miss R. F. Lumsden has formally resigned the post of honoary lady superintendent, and is succeeded by her sister, Miss Katherine Lumsden. The former has given a donation of £100 to the funds, and has been appointed one of the honorary presidents.

THE ABERDEEN GENERAL DISPENSARY.

The annual meeting of the subscribers to the Aberdeen General Dispensary was held this afternoon, and, as a vacancy in the medical staff had to be filled up, there was a large attendance. The report for last year shows that 11,240 patients had received treatment. This is the largest number of patients treated in one year since the institution was founded—it is an increase of 1044 over the number for 1886. There were 252 obstetric cases attended during the year. Drs. Booth, Watt, Ruxton, Edmond, and Gordon were re-elected. Dr. Brander retired by rotation; and for the vacancy there were four candidates—viz., Drs. Beveridge, Cheyne, Gibson, and Sinclair. The final vote lay between the two latter, and Dr. Gibson was elected by a majority of one. Mr. Robertson, the dentist, was also re-elected.

Aberdeen, March 6th.

DUBLIN.

(From our own Correspondent.)

THE MEDICAL COMMISSIONERSHIP, LOCAL GOVERNMENT BOARD.

DESPITE rumours to the contrary, I am in a position to state that up to the present no appointment has yet been made to the above-named post. It is believed probable that Dr. McCabe, of the General Prisons Board, is likely to succeed the late Dr. Croker King.

VICE-REGAL VISIT TO THE ADELAIDE HOSPITAL.

Her Excellency the Marchioness of Londonderry on Saturday visited this hospital, which is one of the best-managed institutions in Dublin. Her Excellency inspected the various wards under the guidance of the visiting staff, and spoke to many of the patients, and when leaving expressed her satisfaction with all the arrangements of the hospital. It may be added that the nursing department in connexion with the hospital is all that can be desired, and it may be interesting to learn that one of the wards (the Farnham) owes its existence to the late Lord Farnham, who gave £1000 to the hospital in acknowledgment of the services rendered to Lady Farnham during her last illness by two nurses sent to her from the hospital.

TESTIMONIAL TO SIR G. B. OWENS, M.D.

As I expected, the response to the appeal for subscriptions to the proposed testimonial to this gentleman has shown in no uncertain way the esteem and respect in which he is held. Up to last week the sums paid or promised reached the very respectable total of £1000, and, of course, this will be increased before the list is closed.

CORK DISTRICT LUNATIC ASYLUM.

This institution appears to be overcrowded, and the architect of the Board of Control is of opinion that a new building should be erected close to the existing buildings. As the proposed addition would consist of chronic, harmless,

incurable cases, it might be possible to reduce the cost of the dietary to very nearly that of the poorhouse scale. Such an addition could be erected at a cost of about £25 per patient — that is, a building which shall provide large dormitories and day-rooms, with rooms for attendants, latrines, baths, &c., but without single rooms.

CORK FEVER HOSPITAL.

At a meeting of the Cork Town Council last week a grant of £450 for the half-year was passed in favour of this hospital. The sum presented for was £600.

THE CORONERSHIP OF WEST CLARE.

The election of a coroner for West Clare will take place next week, but the result of the contest will not be declared until Friday, the 23rd inst. There are four candidates, a solicitor and three medical practitioners—viz, Drs. Studdert, Sexton, and O'Brien; and although all the parties are pronounced Nationalists, the canvassing is carried out in the bitterest hostility to one another. A conflict among the supporters of the rival candidates is considered imminent, and in anticipation of this occurrence a force of several hundred police will be drafted into Kilrush next week, in addition to military, with the detachment of the Berkshire Regiment already quartered at the Cappa Barracks.

A State ball was to have been held last week by his Excellency the Lord-Lieutenant, but in consequence of the death of the Emperor of Germany it has been adjourned. The supper prepared for the occasion has, by the kindness of his Excellency, been distributed among several of the Dublin hospitals.

Dr. W. Neale, of Drogheda-square, Mountmellick, has been placed on the Commission of the Peace for Queen's County.

March 13th.

PARIS.

(*From our own Correspondent.*)

THE CONGRESS OF SURGERY.

THE third annual French Congress of Surgery is being held this week in Paris, under the presidency of M. Verneuil. In delivering the opening address last Monday, M. Verneuil, after the usual compliments to the foreign delegates, said that he took this opportunity of replying to an extraordinary and unexpected attack that had recently been made upon French surgery by M. Billroth. "M. Billroth," said M. Verneuil, "is one of the dignitaries of our Société de Chirurgie; his treatise on General Pathology has been translated twice into our language, and each edition has been presented to the French medical public in the most courteous terms — perhaps even with too much praise. Neither the author nor his work has ever been the object in this country of unjust or hostile criticism..... M. Billroth, however, has thought fit, after a most uncalled-for attack upon M. Pasteur, to express a most contemptuous opinion of French surgery, which he accuses of hobbling after the immense progress of the English and Germans (*de suivre d'un pas boiteux les immenses progrès des chirurgies allemande et anglais*)." M. Verneuil said that the tendency of French surgery was conservative, and it was certainly more enlightened than that which consisted in the daring ablation of every possible organ, and which placed operative interference in the first rank amongst therapeutic agents. Whilst reserving the knife for necessary cases, French surgery attempts to utilise as far as possible all the help that can be obtained from hygiene and general therapeutics. "If," said M. Verneuil, in conclusion, "the fame of the surgeon who acts upon these principles is not trumpeted to the world, as would be the case were he to cut out a lung, or to tie the basilar artery, he may console himself by the thought of the number of cases in which he has secured health and saved life without making a fuss over it."

The first communication was made by M. Ollier of Lyons upon two cases of resection of the wrist, with recovery of movement. The improvement advocated by M. Ollier consists in the conservation of the tendons of the muscles acting on the wrist joint itself. Not only did the patients recover, with movement in the fingers, but also with a considerable degree of flexibility of the hand upon the arm, one of the patients, a young woman, even being able to play the piano.

M. Demons related two cases in which he had practised partial extirpation of the larynx for cancer. In one case, the disease recurred nine months later. The other patient, operated on ten months since, is still well. MM. Dupont and Mollière spoke upon the same question, the latter praising Trendelenburg's cannula.

A long discussion took place upon the proper line of conduct in penetrating wounds of the visceral cavities. M. Chauvel said that the opinion of French surgeons was divided as regards the necessity for immediate laparotomy. There are the "abstentionists," comprising MM. Tillaux and Verneuil; the "moderate interventionists," such as MM. Reclus, Trélat, Bouilly, and Le Fort, who operate at the first signs of peritonitis or serous effusion; and, lastly, those who, following Hamilton and Mac Cormac, always perform laparotomy as an exploratory measure. M. Chauvel said that he belonged to this school, and considered that every wound of the abdomen by firearms required enlargement and exploration of the subjacent parts. Wounds of this kind are extremely serious, if not always mortal, when there is no surgical intervention; and although he did not rely much upon the statistics he had collected, he thought they went to show that non-intervention was a mistake. In forty-one cases of laparotomy for gunshot wounds of the abdomen the proportion of recoveries was 29 per cent. The operation was the more successful the earlier it was practised. Within the first twelve hours there were 40 per cent. of recoveries; within twenty-four hours 30 per cent. After twenty-four hours a fatal result had been constant. M. Chauvel concluded by saying that if intervention be decided upon when there is already a suspicion of peritonitis, it is, as a rule, too late, and when there is already generalised peritonitis it is hopeless. In the discussion which followed, MM. Delorme, Poncet, Reclus, Trélat, Labbé, and others took part.

THE ALLEGED ACTION OF "MÉDECINES A DISTANCE."

A large portion of a recent meeting of the Academy was devoted to reading the report of the commission appointed to examine into the phenomena related by M. Luys six months ago. It is to be hoped that the report will not only put an end to the mystification of which M. Luys has been the victim, but that it may lead other observers in hypnotism to place somewhat less confidence in the veracity of their subjects. When the experiments were performed by M. Luys with tubes of which he knew the contents, the results were the same as he had announced to the Academy, the symptoms observed in the patients corresponding to what would be expected from the medicines enclosed; but when the same experiments were repeated under proper test conditions, the contents of the numbered tubes being known neither to himself nor to the members of the commission, M. Luys' subjects failed in every instance of exhibit the proper symptoms. In a word, the conclusion to the whole affair is that M. Luys has been the dupe of a hysterical patient, and that there is absolutely nothing in all the phenomena so sensationally announced last autumn.

March 14th, 1888.

THE SERVICES.

WAR OFFICE.—Army Medical Staff: Brigade Surgeon John MacKenzie, M.D., has been granted retired pay (dated Feb. 24th, 1888).

Surgeon-Major and Honorary Brigade Surgeon John Anderson, M.D., C.I.E., retired pay, has been allowed to commute his retired pay (dated Feb. 27th, 1888).

Deputy Surgeon-General C. G. Irwin, M.B., has been appointed Principal Medical Officer, North British District.

ADMIRALTY.—The following appointments have been made:—Staff Surgeons Richard G. Brown and John Mackie, to the *President*, additional (dated April 3rd, 1888).

ARTILLERY VOLUNTEERS.—1st Argyll and Bute: Surgeon and Honorary Surgeon-Major J. Hunter resigns his commission; also is permitted to retain his rank, and to continue to wear the uniform of the corps on his retirement (dated March 10th, 1888).—1st Volunteer (Hampshire) Brigade, Southern Division, Royal Artillery: John Hill, Gent., to be Acting Surgeon (dated March 10th, 1888).—

1st Volunteer (Norfolk) Brigade, Eastern Division, Royal Artillery: Acting Surgeon A. Mitchell, M.D., resigns his appointment (dated March 10th, 1888).

ROYAL ENGINEERS (Fortress and Railway Forces).—2nd Tower Hamlets (East London): Acting Surgeon W. Bull resigns his appointment (dated March 10th, 1888).

RIFLE VOLUNTEERS.—1st Linlithgowshire: Wm. Young, M.B., to be Acting Surgeon (dated March 10th, 1888); Thos. Speirs Kirkland, M.B., to be Acting Surgeon (dated March 10th, 1888).—1st Volunteer Battalion, the Prince of Wales's Own (West Yorkshire Regiment): Neville Williams, M.B., to be Acting Surgeon (dated March 10th, 1888).

Obituary.

THOMAS BLIZARD CURLING, F.R.S.

THE death of Mr. T. B. Curling, consulting surgeon to the London Hospital, at the age of seventy-seven, which we regretfully chronicled in our last issue, took place on March 4th, at Cannes. Tempted by the treacherous brightness of the season, a drive was taken on March 2nd, but this incautious exposure induced a sharp attack of pneumonia, and an honoured, useful, and beloved life was terminated in a few hours. Mr. Curling did not die in harness, as many of the profession do. On the contrary, he had relinquished active duty at the London Hospital in 1869, and although he remained a few years longer in private practice, yet the last ten years of his life were spent in well-earned rest and ease at Brighton. He thus had time to review a career as successful as it had been honoured, and to look back upon a life, the integrity and uprightness of which had earned for him the admiration and respect of many, and the influence of which still remains vividly impressed upon his former pupils and co-workers. A year after obtaining the Membership of the Royal College of Surgeons, he procured through the influence of his uncle, Sir William Blizard, the assistant surgeoncy to the London Hospital. Thus it was that at the early age of twenty-two he found a rich and varied clinical and pathological material at his command, which enabled him perhaps to form, at least to exercise, those habits of painstaking and scrupulous exactitude in research which remains stamped upon all his written work. His earliest investigations were upon Tetanus, and were rewarded by the Jacksonian Prize Essay of 1834. This sound work was followed by many communications of interest and importance to the Royal Medical and Chirurgical and Pathological Societies. Conspicuous among such is that upon "Duodenal Ulceration as a consequence of Burns," which will be found in the twenty-fifth volume of the former Society's Transactions. Towards 1855, however, the subject of his articles tended rather to the illustration of diseases of the testes and rectum, and his ripe experience in these sections of surgery caused him to be much sought after as a consultant. He embodied his knowledge in his well-known works on Diseases of the Testes and Diseases of the Rectum. Both of these monographs reached a fourth edition. He became Fellow of the Royal Society comparatively early in his career. He was placed on the Council of the College of Surgeons in 1864, was made Examiner in 1871, and was elected President in 1873.

Perhaps nowhere was Mr. Curling's character more apparent than whilst ward-visiting at the London Hospital. His methodical and punctual habits passed into a proverb with the students, for he usually entered the gates as his visiting hour struck. A strict disciplinarian, he was a terror to the slovenly and slipshod dresser, but an object of respect and admiration to the zealous. Freely blaming if blame was due, he never withheld praise when such was deserved. Exact and punctilious in detail himself, he carried his strong sense of duty to the patient by examining into the smallest minutiæ of dressings and note-taking. Possessing a sound and well-balanced judgment, backed by great clinical experience, he did not permit fancy theories to be built upon insufficient bases. His practice and his teaching were not at variance; both were sound, upright, and just.

RICHARD PATRICK BURKE TAAFFE, M.D.

DR. TAAFFE, whose death occurred at his residence at Brighton on March 3rd, after an illness of three months, was educated at St. Bartholomew's Hospital, and became M.R.C.S. in 1852, and L.S.A. in 1853. Three years later he left London for Brighton, and subsequently became F.R.C.S. Eng., and M.D. and M.S. of London University, and gained the certificates in Sanitary Science at Cambridge University and London.

Dr. Taaffe was for some years in partnership with the late Sir John Cordy Burrows, and acted as surgeon and consulting surgeon to the Sussex Eye Hospital, and as surgeon to the 1st Sussex Artillery Volunteers; in 1877 he was president of the Brighton and Sussex Medico-Chirurgical Society, and took an active part in the Health Congress held in Brighton in 1881. Dr. Taaffe will be remembered chiefly for his connexion with the Royal Alexandra Hospital for Sick Children at Brighton, of which institution he was one of the chief founders. He acted as physician to the Children's Hospital up to the time of his death. In January, 1874, he was appointed Medical Officer of Health for Brighton, which post he filled in the most conscientious and efficient manner, and by his death the town of Brighton loses the valuable services of an able officer.

DR. FEDELE FEDELI.

THE University of Pisa was closed on the 5th inst. out of respect to its Professor of Clinical Medicine, Dr. Fedeli, who died that morning. It remained closed on the following day to enable the Senatus Academicus and the entire body of the students to attend the funeral of their colleague and teacher, who for many years had been a pillar and an ornament of the school.

It was still more, however, in connexion with the Royal Baths of Montecatini that Dr. Fedeli was associated. For forty years he laboured to resuscitate the antique fame of these healing waters and to make their peculiar efficacy known to the profession and the public. He was a worthy follower in the track of the celebrated anatomist Fallopius (1490-1563), and, in more recent times, of Bicchierai, Barzellotti, Targioni-Tozzetti, Livi, and Maruccelli, all of whom wrote able treatises on the remedial virtues of the Montecatini springs. He extended his geologico-meteorological researches, moreover, throughout the whole Val di Nievole, and laid the medical world under lasting obligations by his demonstration of the salutary effects of the Monsummano Grotta—a kind of natural Russian vapour bath which has proved of striking efficacy in rheumatoid arthritis, in gout, and in all neuralgias of a rheumatic description. Among the patients who had Dr. Fedeli to thank for his labours in connexion with the Grotta di Monsummano may be mentioned Garibaldi and Kossuth.

In 1869, when King Victor Emanuel was dangerously ill of miliary fever at his shooting box of San Rossore, near Pisa, the opportune attendance and wise counsel of Dr. Fedeli contributed greatly to the Royal patient's recovery, for which service he received the honourable title of Physician to His Majesty. Recognition of his professional merits, indeed, he had in abundance. He was made Corresponding Fellow of numerous learned bodies in other countries besides his own; he was decorated with many knightly orders; and as Senator in the Parliament of Italy his presence was always welcomed in important State discussions. "His affability," writes a Pisan correspondent, "his courteous address, his animated conversation, made him popular in the highest circles, as his benevolence endeared him to the humblest. He leaves behind him a large heritage of affection, a distinguished name in science, and a fondly cherished memory in the University which his clinical teaching did so much to elevate."

WILLIAM MELLET HOLLIS, J.P.

THIS gentleman, who died at Brighton on the 12th inst., was one of the few survivors of the last century, being in his ninety-third year. He was born at Henley-on-Thames, and was educated at the grammar school of that town. He speedily showed an aptitude for classics, and at the early age

of twelve publicly recited an oration of Demosthenes in the Town Hall. After qualifying for the medical profession at the united hospitals of Guy's and St. Thomas's, where he was a pupil of Sir Astley Cooper, and a fellow-student and an old friend of his nephew Bransby, he obtained the Membership of the College of Surgeons, and at the time of his death was one of the oldest members of that body. He subsequently conducted a lucrative practice at Lewisham, Kent, until failing health compelled his retirement in 1848. After a two years' sojourn on the Continent, Mr. Hollis settled at Brighton, where he had since resided. He was much respected in the town, and held several municipal appointments. Whilst chairman of a committee of the Town Council and an Alderman of the Borough, he was mainly instrumental in ridding the town of the "ash-heap nuisance." Mr. Hollis was also a justice of the peace, and for many years a visiting magistrate to the County Lunatic Asylum. He was twice married, and three of his children survive him.

Medical News.

CENTENARIAN.—From Perth is announced the death of Mrs. Mary Fraser at the age of 106 years.

UNIVERSITY OF GLASGOW. — A. W. Macfarlane, M.D., F.R.C.P. Edin., has been appointed Examiner in Medical Jurisprudence in the University.

THE SEWERAGE OF ESHER.—The foundation stone of the new sewage outfall works at Esher was laid on the 7th inst. by General Sir O. Cavanagh.

CHOLERA, in a severe form, is reported to have broken out amongst the population of Bezwada, and to have extended to Hyderabad.

AT a recent special court of the governors of the Hospital for Sick Children, Great Ormond-street, the construction of a new wing at that institution was sanctioned.

UNIVERSITY OF CAMBRIDGE.—The Special Board for Medicine has recommended that an assistant to the Professor of Surgery be appointed.

THE ninety-ninth annual festival in connexion with the City Dispensary was held on the 6th inst., the Lord Mayor presiding. During the evening subscriptions amounting to £458 were announced by the secretary.

ABERDEEN UNIVERSITY.—The Senatus have conferred the honorary degree of LL.D. on Charles Douglas Fergusson Phillips, M.D. Lond., who is a graduate of this University and a Fellow of the Royal Society of Edinburgh.

THE usual Hospital Sunday collection was held in Wolverhampton on the 11th inst., when appeals were made from the majority of the pulpits in the town and district in aid of the General Hospital and Eye Infirmary.

THE COUNTESS OF DUFFERIN'S FUND.—The third annual report (January, 1888) of the National Association for supplying Female Medical Aid to the Women of India has just been issued.

AYRSHIRE MEDICAL CLUB.—At the annual meeting of the club, held recently, Dr. Robert Dobbie was elected president, Dr. J. H. Alexander, of Dundonald, vice-president, and Dr. W. Moore secretary and treasurer.

VOLUNTEER MEDICAL STAFF CORPS.—Owing to the death of the Emperor William, the distribution of prizes to the above-named Corps, by H.R.H. the Duchess of Albany, on Saturday next, has been indefinitely postponed.

VENTILATION.—The German Association of Gas and Water Engineers has repeated its offer of a prize of £50 for the best essay upon the ventilation of gas-lighted rooms. The offer was first made in 1885, but has so far been without fruit.

AT an inquest held at the Holborn Town Hall on the 7th inst. on the body of a domestic servant, aged twenty-six, who had died while under the influence of chloroform administered for the performance of an operation, the jury returned a verdict of "Death from misadventure."

ROYAL BERKSHIRE HOSPITAL.—Mr. Richard Benyon, of Englefield Park, near Reading, has just given £500 to this hospital, of which he is president.

UNIVERSITY OF DURHAM.—The hon. secretary of the College of Medicine and of the Faculty of Medicine having resigned his appointment, the duties of the post have been taken over by W. P. Mears, M.D.

ST. BARTHOLOMEW'S HOSPITAL.—In the event of Christ's Hospital being moved into the suburbs, the authorities of St. Bartholomew's Hospital intend, it is reported, purchasing the site, with the view of enlarging the medical school and the nurses' quarters.

THE Royal Commission on the Blind, the Deaf and Dumb, &c., have recently made a tour of visits to various institutions in the western and midland counties of England, and have also received information concerning the deaf and dumb from the officials of various institutions.

TESTIMONIAL.—On Friday last Sister Markwell was presented with a carriage clock, with suitable inscription on it, by the visiting and resident staff of the City of London Hospital for Diseases of the Chest, Victoria Park, as a mark of esteem and respect, on the completion of twenty-one years as sister of this institution.

ROYAL MEDICAL BENEVOLENT COLLEGE. — Our recommendation of the claims of this institution to the support of the profession appears to have been more than well founded. We learn that the acceptances for the festival on April 17th are so numerous that the Dinner Committee will be compelled shortly to close their list.

EPIDEMIC IN A GLASGOW INDUSTRIAL SCHOOL.—Drs. Gairdner, Russell, and Gemmell are understood to be engaged in investigating the nature of an obscure disease which has broken out in the Abercromby Roman Catholic Industrial School, Glasgow, and from which four of the boys are said to have died.

A PRIZE of 25,000 francs, given by His Majesty the King of the Belgians, will be awarded in 1893 to the author of the best work on the means of procuring abundant and cheap drinking water of the best quality for large towns, and in particular for Brussels and its suburbs, regard being had to the anticipated growth of population.

THE PROPOSED LOCAL BOARDS AMALGAMATION IN THE HOLMFIRTH DISTRICT.—Mr. Arnold Taylor (from the Local Government Board) has brought to a close his inquiry in the Holmfirth district into the petition of the Holmfirth Local Board for the amalgamation of the local board townships of Austonley, Fulstone, Hepworth, Holme, Netherthong, and Scholes with the Holmfirth Local Board district.

THE BIRKENHEAD BOROUGH HOSPITAL.—An influential and numerously attended meeting has been held at the Town Hall, under the auspices of the Mayor (Mr. F. Thorneley), who presided, to consider a suggestion to hold a ball in aid of the funds of the Borough Hospital, upon which there was a debt at the close of the last financial year of upwards of £200. A committee was appointed to further consider the matter, and report to a future meeting.

NORTH ORMESBY COTTAGE HOSPITAL, MIDDLESBOROUGH.—It appears from the report for 1887, just issued, that there were 416 in-patients, an excess of 36 on the previous year, and the largest number treated in any year since the establishment of the hospital. The out-patients numbered 1025, an increase of 114 as compared with 1886. The revenue was £2352, and expenditure £2289. The hospital was still burdened with a mortgage of £1200.

BUDLEIGH SALTERTON COTTAGE HOSPITAL. — The inhabitants, desirous of having some memorial of the Queen's Jubilee, have decided to erect a cottage hospital as a suitable memorial. A committee was accordingly organised, of which Dr. Brushfield is the chairman. The committee have received (in two donations) upwards of £500 from one gentleman and the offer of an eligible site from another. The contributions altogether amount to about £850. The cost of the proposed building will be £750. The foundation stone was laid by the Rev. James Boucher, in the presence of a large and influential assembly, on the 8th inst. To keep the institution in efficient working order, said Dr. Brushfield, the committee estimate that an income of from £150 to £200 per

annum will be required. Of this sum £110 had already been promised, and they rely, with confidence, to make up the balance from other sources. The medical officer's services will be honorary. The hospital will accommodate six patients, but on an emergency eight. It is hoped the building will be completed in about four months.

ROYAL HOSPITAL FOR DISEASES OF THE CHEST, CITY-ROAD.—From the seventy-fourth annual report, presented to the court of governors of this institution on the 15th inst., it appears that during the past year the total number of in-patients under treatment was 418, as against 305 in 1886, and of out-patients 23,516, as against 24,049. The total expenditure amounted to £5260, as compared with £6720, and the income from all sources to £4300, as against £4051.

SOCIETY OF APOTHECARIES OF LONDON.—The results of the Examination in Arts qualifying for registration as medical student, held in the Hall of the Society on the 2nd and 3rd inst., have just been published. There were 153 candidates, and from the pass-list it appears that 30 were placed in the second class, and 87 were certified as having passed in some subjects, but not in all. The next examination will be held on June 1st and 2nd.

THE POPULATION OF AUSTRALIA.—The Government Statist, Victoria, Mr. Hy. Hayter, estimates the population of Australia in 1886 at 3,427,877, giving an increase of 125,703 on the preceding year. He remarks that the rate of increase of the population of Australia combined with Tasmania and New Zealand in the decennial period intervening between the last two censuses may be set down as 42 per cent. There appears to be every probability of that rate being exceeded in the decade ending with 1891.

ST. JOHN AMBULANCE ASSOCIATION.—The course of First Aid lectures, which were held at Esher, was finished on March 1st, and last week the examination took place, when seventeen candidates, out of the twenty-seven composing the class, were examined by Dr. Coates, R.N., who, after a searching examination, reported all the candidates, with one exception, as being very well up in their work, amongst the successful candidates being the Duchess of Albany.

BURIAL REFORM.—The Duke of Westminster has granted the use of Grosvenor House for the tenth annual meeting of the Church of England Burial, Funeral, and Mourning Reform Association, and will himself preside on Monday, May 14th. The Bishop of Manchester and others will take part in a conference on Burial Reform in the Mayor's parlour, on Wednesday, April 4th. The Mayor of Hull will preside at a similar conference at Hull, on Thursday, March 22nd.

BEQUESTS.—The late Dr. A. Samelson, of 15, St. John-street, Manchester, has bequeathed to the Royal Medical Benevolent College, Epsom, £300; the British Medical Benevolent Fund, London, £300; the Hospital for Incurables, Mauldeth Hall, Manchester, £300; and the Ardwick and Ancoats Hospital, Mill-street, Ancoats, £750, as a fund for the endowment of a child's cot.—At the annual meeting of the subscribers to the Burton Infirmary on the 9th inst., it was announced that the late Lord Hindlip had bequeathed £1000 to the general funds.

INQUESTS ON FIRES.—At the fifteenth annual meeting of the Association of Municipal Corporations, which was held at the Guildhall on the 8th inst., a discussion having arisen on the subject of fire inquests, the City Remembrancer said that the Home Secretary, with the consent of those interested in the promotion of a Bill on the subject by the Corporation of London, had moved to refer the matter to a committee, which was now appointed. It would probably result in a Bill being introduced for the benefit of the country at large by which inquests would be held on the occasion of all serious fires.

PRESENTATION.—The occasion of the removal of Dr. A. G. Macdonald from Auchterderran to Cupar gave his friends and patients an opportunity to present him with a token of their estimate of his professional abilities and personal worth. On Monday, the 11th inst., at a meeting held at the Manse, for the purpose of making the presentation, Mr. Nasmyth, in a few eulogistic remarks, handed to Dr. Macdonald a watch and chain in the name of his patients and late fellow parishioners.

HOSPITAL FOR INFECTIOUS DISEASES AT DEWSBURY.—The prevalence of infectious diseases in several parts of the West Riding has induced the corporation of Dewsbury to provide a new infectious diseases hospital. It will consist of a central block with a wing at each end. In each wing twelve beds will be placed, while the central block will contain nine beds, making provision for thirty-three patients. An administrative department, with four bed-rooms and other necessary accommodation, will be provided. Separate entrances are arranged for each of the two wings.

MEDICAL NOTES IN PARLIAMENT.

Lunacy Acts Amendment Bill.

On the 9th inst., the House of Lords went into committee on this Bill. Clauses 1 to 19 were agreed to. On Clause 20, Lord Dormer moved an amendment for the purpose of compelling the workhouse authorities to provide sufficient and proper accommodation for pauper lunatics. The borough and county asylums in England and Wales were practically full, and as the number of lunatics was increasing at the average rate of 1300 per year, it was proposed to send harmless cases which were now in the asylums to the workhouses, and his object in moving the amendment was to save the inhabitants of the workhouses the discomfort and degradation of having to live in association with lunatics.—The Lord Chancellor thought the amendment was unnecessary, and therefore opposed it. The amendment was negatived without a division, and the clause was agreed to, as were also Clauses 21 to 33.—Lord Herschell moved to insert the following clause after Clause 33:—"The notice by Section 19 of the Lunacy Act, 1853, required to be sent upon the recovery of a patient, shall state that unless the patient is removed within seven days from the date of the notice he will be discharged. If the patient is not removed within seven days from the date of the notice he shall be forthwith discharged without further order." The clause was agreed to, as were also the intermediate clauses up to Clause 57 inclusive. On Clause 58 Lord Dormer moved an amendment, with the object of giving to the local authority power to build a hospital or asylum for private patients, or if the county or borough asylum does not contain accommodation for more than 400 persons. The Lord Chancellor said he could not accept the amendment. The amendment was negatived and the clause agreed to. The Bill passed through Committee.

Vivisection.

Viscount Sidmouth moved that an humble address be presented to Her Majesty for correspondence between the Home Office and the Society for the Protection of Animals from Vivisection in reference to two recent instances of infringements of the law, and asked whether it would in future be a portion of the duties of the authorities at the Home Office to cause legal proceedings to be instituted in similar cases.—Earl Brownlow said it certainly was a portion of the duties of the authorities at the Home Office to cause proceedings to be instituted in cases where the Vivisection Act had been infringed, and that duty had in the past been discharged. This matter was brought before the House a short time ago by the noble viscount, when he himself was not in his place, and the Prime Minister then pointed out that no answer could be given, as the Home Office did not know to what cases the noble viscount referred. Since then the noble viscount had privately informed him upon this point. Cases could be dealt with by the Home Office according to their circumstances, and it was not necessary on every occasion to take legal proceedings. The Government had no objection to lay the correspondence asked for upon the table. The motion was agreed to.

The Sweating System.

The Earl of Dunraven moved:—"That the following lords form the Select Committee to consider the sweating system: The Archbishop of Canterbury, the Earl of Derby, the Earl of Onslow, the Earl of Aberdeen, Lord Clinton, Lord Clifford of Chudleigh, the Earl of Limerick, the Earl of Crawford and Balcarres, the Earl of Dunraven, Lord Sandhurst, Lord Rothschild, Lord Monkswell, and Lord Thring. The motion was agreed to.

In the House of Commons on the 13th inst., Mr. Howell asked the President of the Board of Trade whether it would be possible for a joint committee of both Houses to be appointed to inquire into the sweating system; and, if not, whether the Government would undertake that the Lords' report should be communicated to the Commons.—Sir M. Hicks-Beach, in reply, said that he found it was now too late to adopt the suggestion. He would, however, take care that the suggestion made in the latter part of the question is given effect to.

Teaching University for London.

In the House of Lords on 12th inst., Lord Herschell, in the absence of Lord Granville, asked the Lord President whether he had made up his mind as to the manner in which he would deal with the application for a charter for a Teaching University in London and other like applications for charters, and whether he had come to a conclusion as to a Royal Commission on the subject.—Viscount Cranbrook replied that he had come to the determination to recommend the issue of a small Royal Commission to inquire, and he hoped that at no great distance of time it would be able to report upon a question of great interest to so many.

Pharmacy Acts Amendment Bill.

The report of amendments on this Bill was agreed to.

Cow Disease.

In the House of Commons on the 12th inst., in answer to Mr. Picton, Sir H. Maxwell said that some months ago Professor Brown was instructed to make an inquiry as to the existence among cows of an eruptive disease of the teats, which it was alleged in one case (the Hendon outbreak) had induced scarlatina in man by the agency of the milk. In the course of the inquiry he availed himself of Professor Crookshank's offered assistance in working out the micro-pathology of the affection. In regard to the outbreak in Wiltshire, Professor Crookshank has stated that he considered the disease was the Jennerian cow-pox. Professor Crookshank has not yet furnished a report on the micro-organism of the cow disease. A report on the whole subject is now being prepared and will be issued as soon as possible by the Agricultural Department.

Army Medical Officers.

In answer to Dr. Farquharson, Mr. H. Stanhope said that he had received a communication from the British Medical Association purporting to give the anonymous opinions of several hundred medical officers. These opinions must have been obtained and expressed in a manner altogether in contravention of military discipline. Medical officers, like other officers, have a proper channel through which they can be heard, and he was not prepared to accept any civilian association as their mouthpiece. On the general question of rank he could only repeat what he had said several times last year—namely, that the status of medical officers is just as it was before; and that as regards titular rank, they already hold professional titles for which the exchange to combatant titles, without combatant functions, would be a loss of personal influence.—Dr. Farquharson said he would draw attention to this subject on the Medical Vote.

Asylums.

On the 13th inst., in reply to Mr. Allison, the Chancellor of the Exchequer said that at present he could only say that the whole question of the Parliamentary grants in aid of local taxation was receiving the consideration of the Government in connexion with the proposed Local Government Bill.

American Cheese.

In reply to Mr. W. M'Laren, Mr. Long said that the attention of the Agricultural Department had been called to the large admixture of animal fat in the manufacture of American cheese, which enabled the latter to be sold in this country as pure cheese at such prices as were injurious to the manufacture of pure cheese, and that the Foreign Office had been asked to obtain reports from Consular officers in the United States as to the prevalence of this adulteration in the manufacture of cheese.

Births, Marriages, and Deaths.

BIRTHS.

BARLOW.—On the 4th inst., at Norfolk House, Dalston, the wife of Robert Barlow, M.R.C.S., of a son.

BARNES.—On the 18th ult., at The Bungalow, Prospect Camp, Bermuda, the wife of Surgeon H. J. Barnes, M.S., of a son.

DOBIE.—On the 20th ult., at Bellary, India, the wife of Surgeon-Major S. L. Dobie, 4th Madras Cavalry, of a son.

GORDON.—On the 13th inst., at Farnley House, South Norwood, the wife of G. A. S. Gordon, M.A., L.R.C.P. Ed., L.R.C.S., of a daughter.

JOHNSON.—On the 28th ult., at South-villas, Loampit-hill, Lewisham, the wife of John J. Johnson, M.R.C.S., L.R.C.P.Lond., of a son.

LAMB.—On the 11th inst., at Kensington-park-gardens, the wife of W. H. Lamb, M.B.Lond., of a son.

MCCALLUM.—On the 7th inst., at Elm Lodge, Anstruther, Fife, N.B., the wife of Colin McCallum, M.B., C.M.Ed., of a son.

MARRIAGES.

KEOGH—HART.—On the 9th inst., at the Catholic Church, Serampore, India, Surgeon A. Keogh, M.D., Medical Staff, to Camilla Porterfield, daughter of the late W. H. Sherriff Hart, Captain, 105th L.I., and stepdaughter of Lt.-Col. S. B. Home, Commanding 9th Regiment B.I., Barrackpore, India.

MACDONALD—WINN.—On the 3rd inst., at St. Stephen's, Selly-hill, Greville Matheson MacDonald, M.D., to Phœbe Winn, only sister of Charles Winn, of Birmingham.

VOSS—WHITE.—On Jan. 11th, at St. Paul's Church, Rockhampton, Queensland, Francis Henry Vivian Voss, F.R.C.S.Eng., to Lottie Kerrod, daughter of C. J. White, Esq., of Rockhampton.

DEATHS.

CHAMPNEYS.—On the 10th inst., at Portland House, Cheltenham, Alexander Mundell Champneys, F.R.C.S., late of Hanbury-street, E., aged 66.

DICKSON.—On the 7th inst., suddenly, Wm. James Dickson, M.D. Ed., aged 48, at The Grove, Hackney, E.

HOLLIS.—On the 12th inst., at Brighton, William Mellet Hollis, J.P., M.R.C.S., L.S.A., in his 93rd year.

LATHAM.—On the 9th inst., at Upper Richmond road, Putney, Robert Gordon Latham, M.A., M.D., &c., late Fellow of King's College, Cambridge, in his 76th year.

OLIVER.—On the 13th inst., at King-street, Stockton, W. H. Oliver, L.R.C.P.Ed., L.S.A., aged 60.

N.B.—A fee of 5s. is charged for the Insertion of Notices of Births, Marriages, and Deaths.

Appointments.

Successful applicants for Vacancies, Secretaries of Public Institutions, and others possessing information suitable for this column are invited to forward it to THE LANCET Office, directed to the Sub-Editor, not later than 9 o'clock on the Thursday morning of each week for publication in the next number.

BROADBENT, FRANK, L.R.C.P.Ed., M.R.C.S., has been appointed Medical Officer for the Northern District of the Newark Union.

BURROWS, H. CHAMBERS, L.R.C.P.Ed., M.R.C.S., has been appointed Medical Officer for the Southern District of the Newark Union.

CLARK, ANNIE E., M.D. Berne, M.K.Q.C.P.I., has been reappointed Physician to the Birmingham and Midland Hospital for Women.

COOPER, WILLIAM, M.R.C.S., L.S.A., has been reappointed Medical Officer for the Widnes (Lower) District of the Prescot Union.

CROWTHER, J. WOODWARD, M.R.C.S., L.S.A., has been appointed House-Surgeon to the West Bromwich District Hospital, vice Woodhouse, resigned.

DONALD, ARCHIBALD, M.A., M.D., has been appointed Honorary Surgeon to St. Mary's Hospital, Manchester, vice Cullingworth, resigned.

EASON, ALEXANDER M., L.R.C.P.Ed., L.R.C.S., has been reappointed Urban Medical Officer of Health, and Port Sanitary Medical Officer of Health for Lytham.

EDGINTON, R. W., M.D.Brux., M.R.C.S., has been reappointed Physician to the Birmingham and Midland Hospital for Women.

FROST, FRANCIS T., M.R.C.S., has been appointed Junior House-Surgeon to the Huddersfield Infirmary, vice W. L. W. Marshall, M.R.C.S., resigned.

HARDCASTLE, NICHOLAS, M.R.C.S., L.S.A., has been reappointed Medical Officer to the Workhouse of the Newcastle-upon-Tyne Union.

KING, E. P., M.R.C.S., L.S.A., has been reappointed Medical Officer of Health for Chepstow.

MCDOWALL, J. G., M.D., C.M. Ed., has been appointed Medical Superintendent of the West Riding Asylum at Menston.

MITCHELL, ROBERT, M.D., M.Ch., has been appointed an Honorary Surgeon to the Bury Infirmary, vice A. B. Telford, M.D., L.R.C.S.E., resigned.

SAVAGE, THOMAS, M.D.St.And., F.R.C.S.Eng., has been reappointed Surgeon to the Birmingham and Midland Hospital for Women.

TAIT, LAWSON, F.R.C.S. Eng., has been reappointed Surgeon to the Birmingham and Midland Hospital for Women.

TAYLOR, J. W., F.R.C.S.Eng., has been reappointed Surgeon to the Birmingham and Midland Hospital for Women.

TUCK, HARRY, M.R.C.S., L.S.A., has been appointed Medical Officer for the Prees District of the Wem Union.

TURTON, WILLIAM H., M.B., C.M.Ed., has been appointed Medical Officer of Health for Heanor, Derbyshire.

TYNDALL, FRANCIS, L.R.C.P.Lond., M.R.C.S., has been reappointed Medical Officer of Health for Westhoughton, Lancashire.

WILLIAMS, LIONEL H., M.R.C.S., L.S.A., has been appointed Senior House-Surgeon to the York County Hospital.

WOOD, JOHN, M.A., M.B.Oxon., L.R.C.S.Ed., has been reappointed Medical Officer of Health for the Walsall Rural Sanitary District.

YOUNG, EDWARD H., M.B.Durh., L.R.C.P., M.R.C.S., has been appointed Medical Officer of Health for Okehampton, vice F. C. Bennett, M.R.C.S., deceased.

Vacancies.

In compliance with the desire of numerous subscribers, it has been decided to resume the publication under this head of brief particulars of the various Vacancies which are announced in our advertising columns. For further information regarding each vacancy reference should be made to the advertisement.

BETHLEM HOSPITAL.—Two Resident Medical Students. Apartments, rations, and attendance.

BIRMINGHAM BOROUGH ASYLUM.—Clinical Assistant. Board and residence, but no salary.

BRITISH SEAMEN'S HOSPITAL, Cronstadt, St. Petersburg.—Resident Medical Officer. Salary commencing at £180 per annum, with furnished rooms, fuel, light, and attendance.

CENTRAL LONDON THROAT AND EAR HOSPITAL, Gray's-inn-road.—Two Clinical Assistants. Fee Two guineas.

CHARING-CROSS HOSPITAL.—Assistant Surgeon.—Surgical Registrar.

LIVERPOOL DISPENSARIES.—Two Assistant Surgeons. Salary £80 per annum, with apartments, board, and attendance.

NEW HOSPITAL FOR WOMEN, 222, Marylebone-road.—Clinical Assistant.

NORTHAMPTON GENERAL INFIRMARY.—House Surgeon. Salary £125 per annum, with furnished apartments, board, attendance, and washing.

OWENS COLLEGE, MANCHESTER.—Professor of Obstetrics.

ROYAL LONDON OPHTHALMIC HOSPITAL, Moorfields, E.C.—Junior House-Surgeon. Salary £50 per annum, with board and residence.

ST. PETER'S HOSPITAL FOR STONE, ETC., Henrietta-street, Covent-garden.—Anæsthetist. Honorarium £80 per annum.

WEST DERBY UNION.—Resident Assistant Medical Officer for the Workhouse at Walton-on-the-Hill. Salary £100 per annum, and first-class rations and apartments.

WEST-END HOSPITAL FOR DISEASES OF THE NERVOUS SYSTEM, PARALYSIS, AND EPILEPSY.—Surgeon.

WEST LONDON HOSPITAL, Hammersmith-road, W.—Clinical Assistants.

WESTMINSTER HOSPITAL, Broad Sanctuary, S.W.—Medical Registrar. Salary £40 per annum.

Medical Diary for the ensuing Week.

Monday, March 19.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10.30 A.M., and each day at the same hour.

ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1.30 P.M. and each day at the same hour.

CHELSEA HOSPITAL FOR WOMEN.—Operations, 2.30 P.M.; Thursday, 2.30.

ST. MARK'S HOSPITAL.—Operations, 2 P.M.; Tuesday, 2.30 P.M.

HOSPITAL FOR WOMEN, SOHO-SQUARE.—Operations, 2 P.M., and on Thursday at the same hour.

METROPOLITAN FREE HOSPITAL.—Operations, 2 P.M.

ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.

CENTRAL LONDON OPHTHALMIC HOSPITALS.—Operations, 2 P.M., and each day in the week at the same hour.

SOCIETY OF ARTS.—8 P.M. Prof. W. Chandler Roberts-Austen: Alloys. (Cantor Lecture.)

MEDICAL SOCIETY OF LONDON.—8.30 P.M. Mr. William Adams: On the Successful Treatment of Hammer Toe by the Subcutaneous Division of the Lateral Ligaments.—Dr. Borel: Goitre and its Treatment by Extirpation, illustrated by Twenty-two cases.

Tuesday, March 20.

GUY'S HOSPITAL.—Operations, 1.30 P.M. and on Friday at the same hour. Ophthalmic Operations on Monday at 1.30 and Thursday at 2 P.M.

ST. THOMAS'S HOSPITAL.—Ophthalmic Operations, 4 P.M.; Friday, 2 P.M.

CANCER HOSPITAL, BROMPTON.—Operations, 2.30 P.M.; Saturday, 2.30 P.M.

WESTMINSTER HOSPITAL.—Operations, 2 P.M.

WEST LONDON HOSPITAL.—Operations, 2.30 P.M.

ST. MARY'S HOSPITAL.—Operations, 1.30 P.M. Consultations, Monday, 2.30 P.M. Skin Department, Monday and Thursday, 9.30 A.M.

ROYAL INSTITUTION.—3 P.M. Mr. G. J. Romanes: Before and after Darwin.

ROYAL COLLEGE OF PHYSICIANS OF LONDON.—5 P.M. Dr. W. H. Dickinson: The Tongue as an Indication of Disease. (Lumleian Lecture.)

SOCIETY OF ARTS.—8 P.M. Mr. William Simpson: What Style of Architecture should we Follow?

PATHOLOGICAL SOCIETY OF LONDON.—8.30 P.M. Dr. Goodhart: Osteitis Deformans.—Dr. Wilks: Transverse Furrows on the Nails.—Mr. Sutton: An Exostosis.—Mr. Eve: On the Inoculability of Lupus.—Mr. D'Arcy Power: Sarcoma of the Urinary Bladder.—Mr. E. H. Fenwick: Sarcoma of the Urinary Bladder.—Mr. Colman: Intestines in Diphtheria.—Dr. W. Collier: Tubercular Disease of Supra-renal Capsules. Card Specimens: Mr. Fenwick: Tumour of Urinary Bladder.—Mr. Targett: (1) (for Dr. Fry) Cystadenoma of Thyroid; (2) Popliteal Aneurysm.—Dr. F. T. Pearse: Advanced Surgical Kidneys.—Dr. M. Murray: Cystic Disease of Kidneys.

Wednesday, March 21.

NATIONAL ORTHOPÆDIC HOSPITAL.—Operations, 10 A.M.

MIDDLESEX HOSPITAL.—Operations, 1 P.M.

ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1.30 P.M.; Saturday, same hour. Ophthalmic Operations, Tuesday and Thursday, 1.30 P.M. Surgical Consultations, Thursday, 1.30 P.M.

ST. THOMAS'S HOSPITAL.—Operations, 1.30 P.M.; Saturday, same hour.

LONDON HOSPITAL.—Operations, 2 P.M.; Thursday & Saturday, same hour.

GREAT NORTHERN CENTRAL HOSPITAL.—Operations, 2 P.M.

SAMARITAN FREE HOSPITAL FOR WOMEN AND CHILDREN.—Operations, 2.30 P.M.

UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M.; Saturday, 2 P.M. Skin Department, 1.45 P.M.; Saturday, 9.15 A.M.

ROYAL FREE HOSPITAL.—Operations, 2 P.M., and on Saturday.

KING'S COLLEGE HOSPITAL.—Operations, 3 to 4 P.M.; Friday, 2 P.M.; Saturday, 1 P.M.

CHILDREN'S HOSPITAL, GREAT ORMOND-ST.—Operations, 9 A.M.; Saturday, same hour.

SOCIETY OF ARTS.—8 P.M. Mr. T. H. Thornton: The Evils of Canal Irrigation in India, and their Prevention.

Thursday, March 22.

ST. GEORGE'S HOSPITAL.—Operations, 1 P.M. Ophthalmic Operations, Friday, 1.30 P.M.

CHARING-CROSS HOSPITAL.—Operations, 2 P.M.

NORTH-WEST LONDON HOSPITAL.—Operations, 2.30 P.M.

ROYAL INSTITUTION.—3 P.M. Rev. W. H. Dallinger: Microscopical Work with recent Lenses on the Least and Simplest Forms of Life.

THE PARKES MUSEUM OF HYGIENE.—5 P.M. Mr. A. S. Murray: Physical Training of the Greeks and Romans.

ROYAL COLLEGE OF PHYSICIANS OF LONDON.—5 P.M. Dr. W. H. Dickinson: The Tongue as an Indication of Disease. (Lumleian Lecture.)

Friday, March 23.

ROYAL SOUTH LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.

CLINICAL SOCIETY OF LONDON.—8.30 P.M. Dr. Ord: Case of Hyperpyrexia in Acute Rheumatism treated by Ice-pack.—Dr. Arkle: Two cases of Hyperpyrexia treated by Cold.—Mr. Pearce Gould: Case of Gall-stones, spontaneous fracture, operation, recovery. Living Specimen:—Mr. Parker: A case of Acute Rickets in a Child aged two years and a half.

ROYAL INSTITUTION.—9 P.M. Sir Frederick Bramwell: A Lecture with—and without—Point.

Saturday, March 24.

MIDDLESEX HOSPITAL.—Operations, 2 P.M.

ROYAL INSTITUTION.—3 P.M. Mr. William Archer: The Modern Drama: English.

METEOROLOGICAL READINGS.

(Taken daily at 8.30 a.m. by Steward's Instruments.)

THE LANCET Office, March 15th, 1888.

Date.	Barometer reduced to Sea Level and 32° F.	Direction of Wind.	Dry Bulb.	Wet Bulb.	Solar Radia in Vacuo.	Max. Temp. Shade.	Min. Temp	Rain fall.	Remarks at 8.30 A.M.
Mar. 9	29·50	S.W.	51	50	60	53	47	·19	Cloudy
,, 10	29·36	S.W.	50	48	70	55	48	·05	Raining
,, 11	29·05	S.W.	48	45	60	49	45	·41	Stormy
,, 12	29·27	N.W.	40	39	68	43	39	·09	Cloudy
,, 13	29·65	N.E.	34	32	51	44	31	·02	Overcast
,, 14	29·30	W.	44	43	81	51	33	·41	Cloudy
,, 15	29·21	S.W.	42	41	77	47	39	·35	Overcast

Notes, Short Comments, & Answers to Correspondents.

It is especially requested that early intelligence of local events having a medical interest, or which it is desirable to bring under the notice of the profession, may be sent direct to this Office.

All communications relating to the editorial business of the journal must be addressed "To the Editors."

Lectures, original articles, and reports should be written on one side only of the paper.

Letters, whether intended for insertion or for private information, must be authenticated by the names and addresses of their writers, not necessarily for publication.

We cannot prescribe or recommend practitioners.

Local papers containing reports or news-paragraphs should be marked and addressed to the Sub-Editor.

Letters relating to the publication, sale, and advertising departments of THE LANCET *to be addressed "to the Publisher."*

We cannot undertake to return MSS. not used.

"THE WORKHOUSE."

A FEW weeks ago a correspondent asked in our pages for information as to where the poem headed as above, from the pen of the late Dr. Mushet, could be obtained. We learn that the pamphlet is out of print, but a few copies have been found amongst the effects of the deceased physician, and two of them have been courteously placed at our disposal by Mrs. Mushet.

Boycotted.—1. We doubt if our correspondent has any legal redress; but if he has a case, it should be referred to a solicitor.—2. It can only be a professional custom. Any legal claim must be against the patient for services rendered.

Mr. P. J. Wilkinson should forward the statement he makes to us to the Medical Council. The case is one of serious public importance, and should be brought under the notice of the Council.

M. A. H.—The measure referred to has been repeatedly adopted, though not with conspicuous success.

"ON THE INTERMITTENT CONTRACTIONS OF THE UTERUS DURING THE WHOLE OF PREGNANCY."

To the Editors of THE LANCET.

SIRS,—In answer to the question in your issue of Feb. 25th of your correspondent, Dr. Harris Jones of Wilkes Barré, Pennsylvania, "whether I regard the occurrence of 'false pains,' which so frequently appear during the latter weeks of pregnancy as due to the same cause—viz., exaggerated contractions minus expulsive force," I say, Certainly. These intermittent contractions always going on, are ready to be intensified by any exciting cause, and especially so at the periods of the suspended menstruation. Generally these excitements are not sufficient to cause retraction, and after a little time their effect passes off. But sometimes retraction or expulsive action occurs, and then, as at labour time, the expansion of the os uteri occurs, the ovum presses on its interior, and the machine is set going, endowed after this point with a self-generating force, increasing in intensity as the difficulty increases, very much reminding one of the "Maxim" gun. False pains are sometimes only contractions of normal intensity, but in a tender uterus, and often seen in rheumatic persons. Some women thus seem to be in labour during the whole of pregnancy. The rapidity with which labour can be induced at almost any time of pregnancy is explained now quite readily. Formerly the fact was not explained; indeed, the time for termination of delivery can be precisely stated—the whole process done to order, as Dr. Robert Barnes and myself have pointed out. Dilate the os by elastic bags, turn the fœtus by my method, and in two hours generally the fœtus is expelled naturally. The whole need not occupy more than from six to eight hours. I do not mean to say that this rapidity is often needed, but the power to use it is at our command now.

I am, Sirs, yours faithfully,

George-street, W., March, 1888. J. BRAXTON HICKS,

THE CENSORS' BOARD OF THE ROYAL COLLEGE OF PHYSICIANS.

WE have had our attention directed to an announcement in the third page of the advertising columns of our last issue of a treatise on the Theory and Practice of Medicine by "John Syer Bristowe, M.D. London, F.R.S., and 'formerly' Censor of the Royal College of Physicians." From this statement it would seem that Dr. Bristowe has retired from the Censors' Board of the College.

Physician.—The points raised by our correspondent are discussed in an annotation in our present issue.

Mr. W. Brown.—"Stipulated conditions," no doubt, is meant.

REFUSAL TO MEET IN CONSULTATION.

To the Editors of THE LANCET.

SIRS,—I wish to bring under your notice, for publication, what I take to be a breach of professional etiquette, and with your permission will relate the facts of the case.

On Saturday afternoon last (March 10th) at a quarter past four o'clock, a Mr. M—— called upon me, and stated that his child was dying, that it had been under the care of Dr. Brenchley some few days, that he had seen it that morning and had pronounced that it could not recover, and that his friends had strongly urged him to ask me to meet Dr. Brenchley in consultation. I explained that it was very awkward for me to do so then, as I was due at an appointment I held in a quarter of an hour. However, upon his pressing the matter, and as he was much distressed, I said I would go at once, and would be at his residence in quarter of an hour, and requested him to go immediately to Dr. Brenchley with my compliments, saying that I would meet him there at that time. In due course I arrived at the house, and, to my great surprise, was told by Mr. M—— that Dr. Brenchley refused to meet me in consultation, and had told him that he (Dr. Brenchley) considered Dr. Villanueva greatly inferior to himself, basing his refusal upon those grounds. I could hardly credit such a statement, and wrote to Dr. Brenchley a courteous letter, asking if it were true that he had made such an observation. I enclose you a copy of Dr. Brenchley's reply, and make no comment thereon, but ask you how I should act in the future towards Dr. Brenchley. I may add that we are colleagues at the Camberwell Provident Dispensary. I am, Sirs, yours faithfully,

Camberwell, S.E., March 12th, 1888. F. HORTON VILLANUEVA.

"124, Denmark-hill, S.E., March 11th, 1888.

"DEAR SIR,—Your letter received. M—— asked me if I would meet a man in consultation. I said, Of course, thinking he would get a London man. When he mentioned your name, I said I would rather not meet you in consultation, as I considered my degrees superior to yours, and I would rather you had the case altogether, which I believe is what has happened. So, you see, I did make an observation similar to what you mention, as I think it within my right to do so if I choose.

"Yours truly,

"ALGERNON BRENCHLEY."

"***" It may be within the right of one medical man to refuse to meet another in consultation; but it is not very respectful to the patient or to the profession to do so. A patient or his friends have a natural right for a second opinion, and to select the person to give that opinion; and, provided the person selected is a registered practitioner and practising according to the honourable traditions of the profession, he should be willingly met by the practitioner in attendance. How is the public to respect us if we do not respect one another? It is not a question of rival qualifications, of mere seniority or juniority. It is a question of cordial and courteous co-operation in an anxious profession, in which there is no greater comfort than harmony among neighbours.—ED. L.

L. H. P.—We strongly advise our correspondent to lay all the facts stated in his letter to us of the 7th inst. before the Home Secretary. If what he states be correct, the practice is most undesirable, and should be stopped.

Lionel should consult a surgeon on the matter.

FOREIGN BODIES IN THE INTESTINES.

To the Editors of THE LANCET.

SIRS,—*A propos* of this subject, as well as of the case quoted by Dr. Thorowgood in your issue of Feb. 18th, allow me to mention the following, on the authority of the late Lord Ellesmere and others.

After narrating some anecdotes of the Siege of Vienna ("The Sieges of Vienna, Appendix, p. 171), he says that a student shot a Turk, and "having learned from experience of others that the Turks, either to strengthen the stomach or when mortally wounded to rob the Christians of their booty, were accustomed to roll up the ducats together and swallow them, without further ceremony he ripped up the corpse, and found six ducats so rolled up within it." I have heard on the spot very similar stories of the Sepoys during the Mutiny in India. For an account of a bodkin that was cut out of a woman's bladder ("that day nine weeks she swallowed it") see "Memoirs of the Royal Society," vol. ii., p. 453. In the fourth volume of the same "Abridgement" is a curious account of a "plumb-stone in the guts [of a certain subject] for thirty years," as also of "a petrified child that was supposed to have lain twenty-eight years in its mother's belly," and similar instances are not, I apprehend, so dangerous or uncommon as is generally supposed.—Yours truly,

Auriol-road, W., Feb. 21st, 1888. W. CURRAN.

WHOLESALE AND CHEAP PHYSIC.—SIXTEEN DISPENSARIES UNDER ONE MAN.

A CORRESPONDENT sends us the subjoined handbill. It is a remarkable composition to proceed from a presumably qualified man, not the less so that the sixteen branch dispensaries which constitute his "conjoint scheme" are officered by what are called "resident qualified medical officers." This is, of course, better than if the deputies were unqualified; but it is far from satisfactory. The bills are evidently meant for wide and indiscriminate circulation among the public and the patients of other medical men. The terms are intended by their lowness to attract customers, and it is idle to deny that it is impossible for one man, whatever his power of discipline, to pretend to control a team of sixteen assistants and dispensaries. We advise our correspondent to refer the handbill and the whole case to the bodies from whom the principal holds his diplomas, or to the Medical Council.

Co-operative Medical and Surgical Aid Establishments.—A Resident Qualified Medical Officer at every Branch, as under:—46, Tachbrook-street, Pimlico; 211, Deptford Lower-road; 27, High-street, Peckham; 23, Long-lane, Borough; 190, Camberwell-road; 350, Old Kent-road; 435, Battersea Park-road; 66, Old Kent-road; 91, New Cross-road; 81, High-street, Deptford; 343, Kennington-road; 163, Walworth-road; 182, Jamaica-road; 43, Railton-road, Brixton; 1, St. George's-circus; 173, Southampton-st., Camberwell. Attendances: Morning, 9.30 to 12.30; evening, 6.30 to 9.30; Sunday, 10 to 12 and 7 to 9. Urgent cases seen at any time. Charges during sickness only, payable in advance. Attendance at Surgery, with Medicine, from 1*s.* a week. Attendance at Patient's Home, from 3*s.* a week. Midwifery attended. Vaccination. Any complaints may be addressed to the Secretary, 40, Redcliffe-square, S.W.

An Old Subscriber.—The food has a high reputation; but we have not, so far as we remember, submitted it to analysis.

H. B.—Certainly not.

"HARD TIMES IN THE PROFESSION."

To the Editors of THE LANCET.

SIRS,—Having with much pleasure perused the article which appeared in your last issue upon the above subject, I am induced, as an ordinary country practitioner, to trouble you with my own experience in the matter.

For thirty years at least I have been pretty heavily taxed with the general routine of practice in Wales—club, union, and private,—and I may candidly state that these last four or five years have been to me the most trying of any. The work, the wear and tear of traps and horse-flesh, the outgoings generally are still about the same; nevertheless, the needful, the incomings, are such as demand my most serious attention, taking into consideration the wolf to be kept at bay. It has hitherto been my lot to rough it in a mining district; and "in the matter of estimating medical services" it is unfortunately one of those "in which medical men are lightly esteemed." When I first began practice in this place the working man hardly ever thought of engaging other than a professional man to attend his wife during confinement, and ma time any I returned in the morning having pocketed two or three guineas for the number of cases relieved during the night previous, scarcely ever leaving a house minus the guinea fee for each case; but nowadays, provided a man can engage the services of any old woman, he does, and will do so, even at the risk of his wife's life, rather than call in professional aid, and that for the simple reason that he has not the money to pay.

You say: "It is certain that the remedy rests mainly with the profession itself." What control can the medical profession possibly have upon the laws of supply and demand? Take the district in which I practise as an instance of many which may be noticed in "poor little Wales." Everything in a depressed stand-still state; no circulation of money; no demand for labour, with the sole exception of that of the poor doctor, which he has to render "free gratis for nothing," and depend upon his "means of living direct from heaven." As to my club appointments, I am paid according to the number of men employed at the works, and now, as emigrations and deaths have during the last few years relieved this neighbourhood of nearly the half of its population, my salary has conformably been sadly reduced. Moreover, my private practice has deteriorated to a degree that it is all but useless to send out bills, parties owing £5, £3, or £10 paying to my collector on his rounds at the rate of a shilling, two, or three a month only. And for all this, it may be noticed that during the last eight years our competitors in the "healing art" have multiplied one for each of those previously installed in this supposed argentine arena—in the prime of life and fully qualified—"a profession overstocked" with a vengeance.—Yours faithfully,

March, 1888. HEN WEITHIWR.

To the Editors of THE LANCET.

SIRS,—I have just read your article on sixpenny doctors, and I deny that they are cheap and nasty. It is simply a question of Cash *v.* Credit, and is, in my opinion, an infinitely better system than that of unlimited credit, as practised by many. I myself do less work for more money than when I was in private practice, and I use the same quality of drugs and treat my patients exactly the same. The majority of patients before calling in a medical man go first to a druggist. By charging under the druggists, we sixpenny doctors get the ready money that would otherwise have gone to the druggists. Of course, the main fault is that medical men have really no protection against unqualified practice and counter-prescribing, and till we have, I am afraid sixpenny dispensaries will continue to flourish. I am, Sirs, yours truly,

March 6th, 1888. L.S.A. LOND.

REFUSING TO MEET IN CONSULTATION.

WE have been favoured with another batch of letters referring to Mr. L——'s complaint against Mr. F——'s partner. The case is complicated, as so many of these cases are, by the statements of third parties and vague conversations. In this case the conversation was in a blinding snowstorm, as also the journey of the consultant, who had been on one horse for many hours. It is a pity Mr. C—— did not call on Mr. L——, or send for him, or in some way ascertain Mr. L——'s feelings in regard to meeting him on the occasion of his visit. But we do not see anything that should not be arranged and forgiven.

Mr. Merry.—It is the rule for boards of guardians to give six months' notice to their medical officer. On the other hand, the resignation of a medical officer is understood to hold good as soon as he has made known to his board his intention to resign. If he gives notice to resign in a stated time, it is not properly a resignation, for he has the power to withdraw it before the time expires.

Dr. Thomas (Sheffield).—The paper will appear in an early number.

A QUERY.

To the Editors of THE LANCET.

SIRS,—Can any of your readers oblige me with information as to the results of division of the accessory slips of the extensor tendon of the ring finger in pianists? I should be much obliged for references to published cases. I am, Sirs, your obedient servant,

Manchester, March 9th, 1888. G. A. WRIGHT.

DR. MCVAIL'S "VACCINATION VINDICATED."

IN reply to several correspondents we may say that the above-mentioned work may be obtained of Messrs. Cassell and Co., Belle Sauvage Yard. Its cost is 5*s*.

B. G.—There is nothing necessarily insulting in such a suggestion. It is not a question of relative age. Young men cannot afford to be disrespectful to older ones; and *vice versâ*. Given honourable conduct and character, any two medical men who are requested to meet each other do well to do so if it will gratify a patient.

A. B. C.—The fees of physicians are in the nature generally of *honoraria*, not charges to be enforced by legal measures. A bye-law of the College forbids this. Where such bye-law does not exist, physicians can enforce their claims by an action. This was decided by Mr. Justice Bramwell in the case of Gibbon *v.* Budd.

Mrs. Sturton is thanked.

COMMUNICATIONS, LETTERS, &c., have been received from—Sir Dyce Duckworth, London; Dr. Harkin, Belfast; Dr. Mickle; Mr. Lawson Tait, Birmingham; Dr. Trüsevitch, St. Petersburg; The Lord Mayor of London; Prof. Kisch, Marienbad; Mr. E. Owen, London; Dr. Jas. Shaw; Mr. Corbyn, London; Dr. Mackey, Brighton; Messrs. Arnold and Son, London; Dr. Wilkinson, Smallthorne; Mr. Furness, High Wycombe; Mr. A. L. Roe, Hull; Mr. Merry; Mr. Baigent, Newcastle-on-Tyne; Mr. Macdonogh, Gravesend; Mrs. Sturton; Mr. J. B. Okell, Leicester; Mr. H. P. Symonds, Oxford; Mr. C. R. Abbott, Braintree; Dr. Woodhead, Edinburgh; Mr. W. H. Hall, Chicago; Messrs. Green and Co., London; Mr. D. M. Moir, Edinburgh; Messrs. Barford and Perkins, Peterborough; Mr. Haslam, Birmingham; Messrs. Robertson and Scott, Edinburgh; Mr. Rundle, Southsea; Mr. J. P. Bates, North Shields; Dr. Slade-King; Mr. Wetherell, Stokesley; Messrs. Stern and Co., London; Mr. G. A. Wright, Manchester; Dr. Macnaughton Jones, London; Mr. D. Francis, Northampton; Messrs. Riddle and Co., London; Mr. Barnardo, London; Dr. Can, London; Mr. Noble Smith, London; Mr. V. Jackson, Wolverhampton; Messrs. Sutton and Sons, Reading; Dr. B. W. Richardson, London; Mr. Jordan Lloyd, Birmingham; Dr. J. B. Hamilton, Lucknow; Dr. W. J. Collins, London; Mr. Thomson, Edinburgh; Mr. Creasy, Bucks; Mr. Fuge, Taunton; Mr. Birchall, Liverpool; Mr. Fuller, Bath; Mr. Gilderdale, Wakefield; Mrs. Pratt, Bournemouth; Mr. O. Sunderland, Kent; Mr. Webster, Wigan; Mr. Doyle, Bolington; Miss Robertson, Chippenham; Mr. Taylor, Mattishall; Mr. Curtis, Cork; Dr. Potter, San Francisco; Mr. Gurner, London; Mr. Binks, Wakefield; Mr. Mason, London; Mr. Macpherson, Middlesbrough; Messrs. Burroughs and Co., London; Mr. Davies, London; Mr. Maw, Bradford; Messrs. Sang and Barker, Edinburgh; Mr. Jeffery, Epsom; Messrs. Dawson and Son, Montreal; Mr. Butterfield, Northampton; Mr. Elliott, Carlisle; Mr. Knight Treves, Margate; Semper Eadem; The Liverpool Northern Hospital; Creta, London; M.D., London; S., London; The Boscombe Infirmary, Bournemouth; Dispenser, London; S. T.; The Royal York Baths; H. B.; B. G.; M. A. H.; Surgeon, Oxon; The Western General Dispensary, London.

LETTERS, *each with enclosure*, are also acknowledged from—Dr. Walker, Forfar; Mr. Clouting, Thetford; Mr. Parry, Bangor; Messrs. Carson and Watson, Glasgow; Dr. Anderson, Denton; Mr. Nicholls, Bury St. Edmunds; Mr. Henegan, Roscommon; Dr. Thompson, Kirby Folley; Mr. Alcock, Jarrow; Dr. Tetley, Keighley; Mr. Bates, New York; Mr. Wallis, St. Mawes; Mr. Potter, Hull; Messrs. Partridge and Cooper, London; Mr. Tailer, Broseley; Mr. Blackstone, Bradford; Mr. Dodsworth, Douglas; Mr. Watson, St. Austell; Mr. Casey, Preston; Mr. Woodward, Worcestershire; Mr. Richardson, Brighton; Mr. Barrett, Wisbech; Mr. Merry, Norwich; Mr. McCallum, North Britain; Mr. Broughton, Ipswich; Mr. Bunting, Notts; Mr. Horner, Tonbridge; Mr. Richards, Ross; Dr. Day, London; Mr. Mander, Bedford; Mr. Milne, London; Mr. Hamilton, Galway; Mr. Blomfield, London; Mr. Butler, London; Dr. Dowse, London; Dr. Worthing, Enfield; Mr. Tully, Hastings; Mr. Scott, Yorks; Mr. Lapping, Forest Gate; Mr. Paul, Camberwell; Dr. Cruise, Dublin; Messrs. Preston Bros., Huddersfield; Mr. Coltman, Leicester; Messrs. Watkins and Osmond, London; Mr. Appleton, London; Drs. Thompson and Thompson, Launceston; Mr. Laskey, Bristol; Mr. Reid, Canterbury; Mr. Beckton, Sheffield; Mr. Down, Ilfracombe; Messrs. Seatree and Sons, Liverpool; Mr. Dawson, Bath; Mr. Blenkarne; Messrs. Keith and Co., Edinburgh; Mr. Wormald, Manchester; Mr. Bell, Birkenhead; Miss Ingley, Yorks; Miss Campbell, Slough; Mr. Scott, Blackburn; Miss Stears, Co. Antrim; Mr. Stretton, Kidderminster; St. Clair, Birmingham; Graduate; F. S., London; Wolverhampton and Staffordshire Hospital; M.B., London; R. F. S., Colchester; The Municipal Charities, Bath; Medicus, Pentonville; The Royal United Hospital, Bath; R. R., Burnley; R. M., London; M. J., Bedford; The Stockport Infirmary; Hilda, Northallerton; C. D., Sheffield; The Johannes Mineral Water Company, London; A. Z., London; Deaconess Elsie, London; Veritas, London; Medicus, Glasgow; Ratione non Ira, Edinburgh; Medicus, Huddersfield; W. L., Notting-hill; The Matron, Kidderminster; Suburban, London; M.D., Croydon; Y. Z., London; Medicus, Leeds; J. H., Grantown; Sanitas, London; Surgeon, Liverpool; A. B. C., London; Principal, Southport.

Ayr Observer, Lincolnshire Chronicle, Advocate of India, British Press and Jersey Times, Indicator and West London News, Fifeshire Journal, Hong Kong Daily Express, Hertfordshire Express, East Kent Gazette, Surrey Advertiser, North-Eastern Daily Gazette, Shields Daily News, Windsor and Eton Gazette, Walsall Observer, &c., have been received.

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